

**NOTICE OF HEARING & AVAILABILITY OF  
DRAFT ENVIRONMENTAL IMPACT REPORT (DEIR)  
P13-0685/P13-0852, RIVERSIDE FREE METHODIST CHURCH DEMOLITION PROJECT  
IN THE CITY OF RIVERSIDE, CALIFORNIA  
(SCH NO. 2014121011)**

**PROJECT DESCRIPTION:** The proposed demolition project will consist of site grubbing and clearing; building demolition, salvage, and removal; removal of an on-site septic system; and rough grading. Project activities will take approximately 28 work days occurring over a period of two to three months. The proposed project is anticipated to occur in the latter half of 2015. The church facility has been served by an on-site septic system. This system will be removed under the proposed project and will not be replaced at this time. Future development in accordance with the California Baptist University (CBU) Specific Plan) will need to be connected to the City's sewer system.

The demolition activities associated with the project are:

- Tree and landscape removal;
- Existing structure hazardous materials abatement;
- Removal of the on-site septic system;
- Existing structure demolition; and
- Hardscape and foundations demolition.

Tree and landscape removal and existing structure hazardous materials abatement will occur concurrently, the former lasting three days and the latter 10 days. Next, existing structure demolition will occur over approximately five days. Demolition of hardscape and foundations will follow, taking approximately 10 days.

**PROJECT LOCATION:** 8431 Diana Avenue in Riverside, California, The approximately 3.14-acre project site is located at in the southeast portion of the CBU Riverside campus, approximately 107 feet north of State Route 91 (SR-91). The site is bounded by academic facilities associated with CBU to the north, west, and east, and Diana Avenue to the south. See Figure 1-1, Regional and Project Location; and Figure 1-2, Project Site.

**SIGNIFICANT EFFECTS:** The DEIR analyzed the following topical environmental issue areas: Air Quality, Biological Resources, Cultural Resources, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Noise, and Traffic.

The Proposed Project, if approved and implemented, is expected to result in the following Significant an Unavoidable Impacts:

- Cultural Resources (Impacts caused by the demolition of the Riverside Free Methodist Church, which is a historic resource, cannot be feasibly mitigated to a level less than significant. Therefore, this impact is significant and unavoidable.)

All other impacts studied in the DEIR will be less than significant impacts, or less than significant impacts with feasible mitigation measures.

**HAZARDOUS WASTE SITES:** Pursuant to Section 15087c6 of the Guidelines for California Environmental Quality Act the City acknowledges the non-existence of hazardous waste sites within the project area reviewed by this Draft EIR.

**PUBLIC HEARINGS:** The City of Riverside will hold formal public hearings on the above noted project and the DEIR with the City Cultural Heritage Board on May 20, 2015, with the City Planning Commission on May 21, 2015, and with the City Council on June 23, 2015.

**PROJECT CONTACT:** Teri Delcamp, Historic Preservation Senior Planner

**PHONE:** (951) 826-2117

**E-MAIL:** [tdelcamp@riversdieca.gov](mailto:tdelcamp@riversdieca.gov)

**PUBLIC REVIEW AND WRITTEN COMMENTS:** The review period for submitting written comments on the DEIR pursuant to State CEQA Guidelines Section 15088 commences on March 27, 2015, and will close on May 11, 2015, at 5:00 p.m. Written responses to any comments submitted within this period will be made by the City and included in the Final EIR provided to the City Council. All written comments should be directed to Teri Delcamp, Historic Preservation Senior Planner at the address below. Comments may also be submitted via e-mail. Pursuant to State law, no written response to comments received after May 11, 2015, at 5:00 p.m. is required. If you have any questions regarding the project or EIR, please contact Teri Delcamp by e-mail or phone as indicated above.

Comments should be addressed to: Teri Delcamp, Historic Preservation Senior Planner  
City of Riverside, Planning Division  
3900 Main Street, 3<sup>rd</sup> Floor  
Riverside, CA 92522

**DOCUMENT AVAILABILITY:** The DEIR is available for purchase (CD's are free) at the City Planning Division, located at the address above, and may also be viewed on the City's website at <http://www.riversideca.gov/ceqa/>, as well as at the City libraries as indicated below.

Main Branch Library  
3581 Mission Inn Avenue, 92501

Marcy Branch Public Library  
6927 Magnolia Avenue, 92506

**PUBLIC HEARING:** Decisions of the City Cultural Heritage Board and City Planning Commission are appealable to the City Council within ten calendar days following the respective meeting dates. Appeal procedures are available from the Planning Division.

Interested persons are invited to appear at the hearings to express their opinions on the above matter.

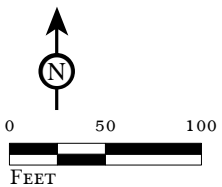
If you challenge the above proposed action in court, you may be limited to raising only those issues you or someone else raised at the public hearings described in this notice, or in written correspondence delivered to the Planning Division at, or prior to, the public hearings.





LSA

FIGURE 2



 Project Location

*Riverside Free Methodist  
Church Demolition Project*

Project Site

SOURCE: ESRI World Imagery, 2012; Riverside County, 2014

I:\CTR1401\Reports\General\fig2\_ProjectSite.mxd (11/25/2014)

# DRAFT ENVIRONMENTAL IMPACT REPORT

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SCH NO. 2014121011

## RIVERSIDE FREE METHODIST CHURCH DEMOLITION PROJECT



LSA

March 25, 2015

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# **DRAFT ENVIRONMENTAL IMPACT REPORT**

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**SCH NO. 2014121011**

## **RIVERSIDE FREE METHODIST CHURCH DEMOLITION PROJECT**

City of Riverside  
Community Development Department  
3900 Main Street  
Riverside, California 92522

LSA Project No. CTR1401

**LSA**

**March 25, 2015**

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## **EXECUTIVE SUMMARY**

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This section provides a summary of the Draft Environmental Impact Report (DEIR) for the Riverside Free Methodist Church (RFMC) Demolition Project (proposed project). The State Clearinghouse (SCH) has numbered the project SCH No. 2014121011. Included in this summary are areas of known controversy and issues to be resolved, a summary of project alternatives, a summary of all project impacts and associated mitigation measures, and a statement of the ultimate level of significance after mitigation is applied.

### **ES.1 DOCUMENT PURPOSE**

This DEIR has been prepared by the City of Riverside (City), as lead agency, to inform decision makers and the public of the potential significant environmental effects associated with the proposed project. This DEIR has been prepared in accordance with the California Environmental Quality Act (CEQA) of 1970 (California Public Resources Code, Section 21000 et seq.) and the Guidelines for Implementation of the California Environmental Quality Act (CEQA Guidelines; 14 CCR 15000 et seq.) published by the Public Resources Agency of the State of California and in accordance with the City's CEQA Guidelines.

The purpose of this DEIR is to focus the discussion on those potential effects on the environment of the proposed project that the lead agency has determined may be significant. In addition, feasible mitigation measures are recommended, when applicable, that could reduce significant environmental impacts or avoid significant environmental impacts.

### **ES.2 PROJECT LOCATION**

The approximately 3.14-acre project site is located at 8431 Diana Avenue in Riverside, California, in the southeast portion of the California Baptist University (CBU) Riverside campus, approximately 107 feet north of State Route 91 (SR-91). The site is bounded by academic facilities associated with CBU to the north, west, and east, and Diana Avenue to the south. See Figure 1-1, Regional and Project Location; and Figure 1-2, Project Site in Chapter 1.0 of this DEIR.

The uses adjacent to the proposed project site are CBU facilities planning and services to the north; SR-91 to the south; a CBU recreation center, a CBU wellness center, Lancer Plaza, and commercial retail space (Harbor Freight) to the east; and CBU student housing (Lancer Arms apartments) to the west. Project location is further discussed in Chapter 2.0, Project Description, of this EIR.

## **ES.3 PROJECT DESCRIPTION**

### **ES.3.1 Background**

In 1950, the Los Angeles Baptist Association opened the doors of California Baptist College in El Monte. In 1955, the college relocated to the Riverside campus. Today, CBU is one of the top private Christian liberal arts colleges and universities in Southern California offering bachelor's, master's, and credential programs in their Riverside and San Bernardino campuses and online. The 156.4-acre Riverside main campus contains Spanish-style buildings accommodating classrooms, campus housing, a library, offices, and maintenance and athletic facilities. In the midst of dynamic growth, CBU continues the tradition of education in a Christian environment.

The proposed project is the demolition of existing structures at the site by CBU. The proposed project is within the CBU Specific Plan (CBUSP) and is occupied by the RFMC. The CBUSP was approved by the Riverside City Council on March 26, 2013. A Mitigated Negative Declaration (MND) was approved with the CBUSP in accordance with CEQA. However, CBU did not own the property at the time the MND was adopted for the CBUSP. Consequently, the demolition of the existing structures on site for the purposes of implementing the CBUSP was not analyzed in the MND. CBU subsequently acquired the property after the MND was adopted. The JM Research and Consulting (JMRC)<sup>1</sup> report prepared for the CBUSP found RFMC eligible for Structure of Merit status and, based on this, Title 20 defines the property as a Cultural Resource, which is a historic resource under CEQA. The demolition of the RFMC is being analyzed at the EIR level due to the potentially significant historical status of the RFMC. In addition, several other topics (Air Quality, Biological Resources, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Noise, and Transportation and Traffic) were not fully analyzed in the proposed project's Initial Study (IS) as the technical studies on which the analysis in the IS relied were not complete. These topics are fully analyzed in this DEIR. Any future development on the project site will be subject to the CBUSP.

### **ES.3.2 Project Objectives**

Project objectives allow for the analysis of reasonable alternatives to the proposed project. Reasonable alternatives must be analyzed in accordance with Section 15126.6 of the CEQA Guidelines.

The overall project goal is to prepare a site for future use consistent with the CBUSP. The project objectives are as follows:

- Prepare a site in order to maximize future use by CBU, in accordance with the approved CBU Specific Plan.

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<sup>1</sup> JM Research and Consulting (JMRC), *Cultural Resources Survey, California Baptist University Specific Plan*, 2012 (excerpted in Wilkman Historical Services Report).

- Accommodate future growth of the CBU campus.
- Remove an on-site septic system to enhance the use of the property and to facilitate a future sewer connection.

### **ES.3.3 Required Permits and/or Approval**

Implementation of the proposed project may require permits or other forms of approval from public agencies or other entities prior to construction of the proposed project. They include, but are not limited to, the following.

#### **City of Riverside**

Certification of this DEIR and a Certificate of Appropriateness will be required in order to implement the proposed project. A Certificate of Appropriateness application is required for properties that are designated or eligible for designation in accordance with the criteria set forth in the City's Cultural Resources Ordinance (Title 20 of the Riverside Municipal Code). The Certificate of Appropriateness process is intended to ensure that the historic integrity of these properties is maintained whenever exterior improvements are made. As part of the process, impacts to historic properties are addressed in accordance to CEQA requirements.

#### **Regional Water Quality Control Board, Santa Ana Region**

An NPDES Construction General Permit is required for grading activities of one acre or larger. Since the demolition project would also include grading activities to remove hardscape and the septic system resulting in a disturbance of more than one acre of soil, the applicant must file a Notice of Intent with the Regional Water Quality Control Board, Santa Ana Region, and obtain a General Construction Activity Stormwater Permit pursuant to the NPDES regulations established under the Clean Water Act. This permit requires preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP), which is intended to prevent degradation of surface and ground waters during the grading and the demolition process.

#### **South Coast Air Quality Management District**

A fugitive dust control plan submitted to the South Coast Air Quality Management District for approval will be required prior to issuance of grading permits (SCAQMD Rule 403).

## **ES.4 SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES**

Table ES-1, Summary of Environmental Impacts and Mitigation Measures, provides a summary of the impact analysis related to the proposed project. The table identifies a summary of the significant environmental impacts resulting from the project pursuant to the CEQA Guidelines

Section 15123(b)(1). For more detailed discussion, please see Chapter 4.0 of this document. Table ES-1 also lists the applicable mitigation measures related to identified significant impacts, as well as the level of significance after mitigation is identified. As stated in Chapter 2.0 of the EIR, the Initial Study (IS) prepared and circulated with the Notice of Preparation (NOP) for public review on the proposed project concluded that the proposed project would not result in significant impacts to aesthetics, agriculture and forestry resources, geology and soils, hydrology and water quality, land use and planning, mineral resources, population and housing, public services, recreation, and utilities and service systems; therefore, these topics are not addressed in the DEIR and not summarized in Table ES-1.

**Table ES-1**  
**Summary of Environmental Impacts and Mitigation Measures**

Environmental Topic	Impact Before Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
<i>Air Quality</i>			
a. Applicable air quality plan	Less than significant	N/A	N/A
b. Projected air quality violation	Less than significant	N/A	N/A
c. Cumulatively considerable net increase of criteria pollutants	Less than significant	N/A	N/A
d. Pollutant concentrations	Less than significant	N/A	N/A
e. Objectionable odors	Less than significant	N/A	N/A
f. Cumulative air quality impact	Less than significant	N/A	N/A
<i>Biological Resources</i>			
a. Impacts to sensitive or special-status species	Potentially significant	<p><b>MM BIO-1:</b> Initial ground-disturbing activities (e.g., demolition, grading) should be conducted outside the bird nesting season (February 15 through August 31). If project activities are planned during the bird nesting season, nesting bird surveys should be conducted within 30 days prior to disturbance to ensure birds protected under the MBTA are not disturbed by demolition-related activities such as noise and increased human presence.</p> <p>The survey shall consist of full coverage of the on-site trees. If no active nests are found, no additional measures are required. If active nests are found, the nest locations shall be mapped by the biologist utilizing GPS equipment. The nesting bird species will be documented and, to the degree feasible, the nesting stage (e.g., incubation of eggs, feeding of young, near fledging). The biologist shall establish a no-disturbance buffer around each active nest. The buffer will be determined by the biologist based on the species present and surrounding habitat. No construction or ground disturbance activities shall be conducted within the buffer until the biologist has determined the nest is no longer active and has informed the construction supervisor that activities may resume.</p>	Less than significant

**Table ES-1**  
**Summary of Environmental Impacts and Mitigation Measures**

Environmental Topic	Impact Before Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
b. Impacts to sensitive natural communities	No impact	N/A	
c. Impacts to federally protected wetlands	No impact	N/A	
d. Impacts to wildlife movement	Less than significant	N/A	N/A
c. Conflict with local policies protecting biological resources	No impact	N/A	N/A
d. Conflict with habitat conservation plan	Less than significant	N/A	N/A
e. Cumulative biological resource impact	No cumulative impact	N/A	N/A
<i>Cultural Resources</i>			
a. Adverse change in the significance of a historical resource	Potentially significant	<p><b>MM CUL-1:</b> Prior to the issuance of a demolition permit, California Baptist University (CBU) shall produce evidence it has hired a qualified professional and funded the preparation of a HABS Level II (35 mm photography) documentation of the property. The report shall be submitted to the City of Riverside Historic Preservation staff for review and approval prior to the issuance of a demolition permit.</p> <p><b>MM CUL-2:</b> Prior to issuance of a demolition permit, and in cooperation with the RFMC, CBU shall produce evidence it has hired a qualified graphic arts professional and funded the preparation of a digital version of the church history book titled "The Riverside Free Methodist Church Record." CBU shall secure RFMC's approval of the final design of the document. CBU shall also provide the church with a copy of the digital file and 125 bound copies of the document prior to the issuance of a building permit for the future use of the property.</p> <p><b>MM CUL-3:</b> Prior to issuance of a demolition permit, CBU shall produce evidence it has hired a qualified professional to design an interpretive plaque, describing and illustrating the history of RFMC. The design and text of the plaque shall be subject to the approval of the Riverside Historic Preservation staff and RFMC. The design, fabrication, and installation shall be paid for by CBU, and shall be coordinated with the design and completion of the future use of the site. The interpretive</p>	Significant

**Table ES-1**  
**Summary of Environmental Impacts and Mitigation Measures**

Environmental Topic	Impact Before Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		<p>plaque shall be on or in the immediate vicinity of the RFMC site.</p> <p><b>MM CUL-4:</b> Prior to issuance of a demolition permit, CBU shall provide for architectural salvage from the Sanctuary, with the first priority given to RFMC. Once RFMC has identified what it wants to salvage, CBU shall give a nonprofit historic preservation advocacy group an opportunity to identify what it wants to salvage. All salvage operations shall be completed within 45 days of notice to RFMC and the historic preservation advocacy group identified CBU.</p> <p><b>MM CUL-5:</b> CBU shall annotate on the demolition plans for the RFMC property, the relocation of the two <i>Phoenix canariensis</i> and one of the <i>Washingtonia robusta</i> palm trees from the church property to fill in gaps among the trees on Palm Drive as specified in Figure 31 of the WHS cultural resources report.</p>	
b. Adverse change in significance of an archaeological resource	Potentially significant	<b>MM CUL-6:</b> Should archaeological resources be unearthed during project activities, all work must be halted and redirected until a qualified archaeologist can examine the site and determine an appropriate course of action.	Less than significant
c. Cumulative cultural resource impact	Less than significant	N/A	N/A
<i>Greenhouse Gases and Climate Change</i>			
a. Generate direct or indirect greenhouse gas emissions	Less than significant	<p><b>MM GHG-1:</b> To ensure reductions below the expected "Business As Usual" (BAU) scenario, the project will implement a variety of measures that will reduce its greenhouse gas (GHG) emissions. To the extent feasible, and to the satisfaction of the City of Riverside (City), the following measure will be incorporated into the project construction:</p> <ul style="list-style-type: none"> <li>• Divert at least 50 percent of the demolished and/or grubbed construction materials (including, but not limited to, soil, vegetation, concrete, lumber, metal, and cardboard).</li> </ul>	Less than significant
b. Conflict with a plan, policy, or regulation adopted to reduce greenhouse gas emissions	Less than significant	N/A	N/A

**Table ES-1**  
**Summary of Environmental Impacts and Mitigation Measures**

Environmental Topic	Impact Before Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
<i>Hazards</i>			
a. Exposing public or environment to hazardous materials	Potentially significant	<b>MM HAZ-1:</b> Prior to demolition activities of the proposed project, a lead-based paint and asbestos survey shall be conducted. Should lead-based paint or asbestos-containing materials be identified during survey, abatement of these materials will be accomplished in accordance with local, State, and Federal guidelines.	Less than significant
b. Exposing school to hazardous materials	Less than significant	N/A	N/A
c. Located on a hazardous materials site	Less than significant	N/A	N/A
e. Cumulative hazards or hazardous materials impact	No Cumulative Impact	N/A	N/A
<i>Noise</i>			
a. Noise in excess of established standards	Potentially significant	<ul style="list-style-type: none"> <li><b>MM NOISE-1:</b> During all project site excavation and grading on site, demolition contractors shall equip all equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturers' standards. All stationary equipment shall be placed so that emitted noise is directed away from the campus apartments nearest the project site.</li> <li><b>MM NOISE-2:</b> Equipment staging areas shall be located as far as feasible from the on-campus apartments.</li> <li><b>MM NOISE-3:</b> Haul truck deliveries shall be limited to the demolition hours. Haul routes shall not pass sensitive land uses, to the extent feasible.</li> <li><b>MM NOISE-4:</b> On-campus residents shall be notified, via postings on the project site, 24 hours before major demolition-related noise impacts commence.</li> </ul>	Less than significant

**Table ES-1**  
**Summary of Environmental Impacts and Mitigation Measures**

Environmental Topic	Impact Before Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
b. Excessive groundborne vibration or groundborne noise levels	Less than significant	N/A	N/A
c. Temporary or periodic increase in ambient noise levels	Potentially significant	<b>MM NOISE-1:</b> See above <b>MM NOISE-2:</b> See above. <b>MM NOISE-3:</b> See above. <b>MM NOISE-4:</b> See above	Less than significant
d. Cumulative noise impact	Less than significant	N/A	N/A
<i>Transportation and Traffic</i>			
a. Conflict with applicable traffic performance standard	Less than significant	N/A	N/A
b. Conflict with applicable congestion management program	Less than significant	N/A	N/A
c. Cumulative impact to transportation	Less than significant	N/A	N/A

N/A = not applicable

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## **ES.5 AREAS OF CONTROVERSY/ISSUES TO BE RESOLVED**

Section 15123(b) (2) of the CEQA Guidelines requires that areas of controversy known to the lead agency must be stated in the EIR summary. Issues of interest to the public and public agencies were identified during the 30-day public comment period of the IS and NOP. Written comments in response to the NOP were received from the following agencies:

- State of California Governor's Office of Planning and Research – State Clearinghouse
- South Coast Air Quality Management District
- California Department of Transportation
- Native American Heritage Commission
- Riverside County Airport Land Use Commission
- Sempra Utilities

The IS, NOP, distribution list, and comment letters received during the NOP review period are included in Appendix A of this EIR.

Section 15123(b)(3) of the CEQA Guidelines requires that an EIR identify issues to be resolved; this includes the choice among alternatives and whether or how to mitigate significant impacts. The major issues to be resolved for the proposed project include decisions by the City as to whether this DEIR adequately describes the potential environmental impacts of the proposed project, whether the recommended mitigation measures should be adopted or modified, whether additional mitigation measures need to be applied, whether the proposed project should or should not be approved as proposed, or whether the proposed project should be modified based on the alternatives considered in this DEIR.

## **ES.6 SUMMARY OF PROJECT ALTERNATIVES**

Section 15126.6 of the CEQA Guidelines identifies the parameters within which consideration and discussion of alternatives to the proposed project should occur. As stated in this section of the guidelines, alternatives must focus on those that are reasonably feasible and that attain most of the basic objectives of the proposed project. Each alternative should be capable of avoiding or substantially lessening any significant effects of the proposed project. The rationale for selecting the alternatives to be evaluated and a discussion of the No Project Alternative are also required, per Section 15126.6.

### **ES.6.1 Alternatives Evaluated in Preparation of RCH Expansion Project**

This DEIR includes an evaluation of the following alternatives:

- No Project Alternative – Continued RFMC or Other Church Use.
- Alternative 1 – Adaptive Reuse.
- Alternative 2 – Relocation.

**ES.6.1.1 No Project Alternative**

The No Project Alternative assumes that the project site would not be modified and the existing church facilities would remain and continue in operation. The two on-site historic buildings (church and fellowship hall) would not be removed or demolished. The church would continue to operate despite the project site being zoned with CBUSP uses. Although project-level impacts would be avoided, the No Project Alternative would impede the development of the CBUSP land use of the site. The proposed project is considered necessary in order to meet the growth and development goals of CBU. This alternative would not meet the project objectives; however, CEQA requires the alternative to be analyzed.

**ES.6.1.2 Alternative 1: Adaptive Reuse**

Alternative 1 proposes to preserve the historic buildings and utilize them for planned CBUSP uses. Under this alternative, the church and fellowship building would not be demolished, but the existing uses would change to accommodate the CBU land use. This alternative would address most basic objectives of the project; however, without demolishing the church the site would be potentially compromised in its ability to fully accommodate future planned uses. The greatest potential use of the site would therefore not be achieved. Overall, this alternative would have reduced impacts as a result of not having to demolish existing structures.

**ES.6.1.3 Alternative 2 – Relocation**

Alternative 2 would involve the relocation of the Church and Fellowship Hall. This alternative would allow for the project site to be fully cleared for future development, and would also remove a significant and unavoidable impact associated with demolition of historic structures on site. The feasibility of Alternative 2 is determined primarily by two factors: finding a suitable location and relocation structural capability of the historic buildings. The surrounding vicinity of the project site, including historic districts, is developed and urbanized, with few vacant properties available that could house the RFMC. However, a one-acre vacant lot that could potentially house of the RFMC has been identified on 9185 Hawthorne Avenue, which is approximately 1.2 miles northwest of the project site. Alternative 2 meets the core objectives of the project by rendering the site available for future CBU uses. It would also allow for the removal of the on-site septic system. However, due to the size of the church and resulting difficulty in its relocation, this alternative is not considered feasible.

## ES.6.2 Environmentally Superior Alternative

Table ES-2, Comparison of Impacts of the Alternatives, provides a summary of the alternatives impact analysis considered in the DEIR and identifies the areas of potential environmental effects per CEQA, and ranks each alternative as better, the same, or worse than the proposed project with respect to each issue area.

**Table ES-2**  
**Comparison of Impacts of the Alternatives**

Environmental Issue Area	Proposed Project	No Project	Alternative 1 – Adaptive Reuse	Alternative 2 – Relocation
Aesthetics	LTS	—	—	—
Air quality	LTS	▼	▼	▼
Biological resources	LTS	▼	▼	—
Cultural resources	SU	▼	▼	▼
Geology and Soils	LTS	—	—	—
Greenhouse gas emissions	LTS	▼	—	▼
Hazards and hazardous materials	LTS	▼	▼	—
Hydrology and water quality	LTS	▼	▼	—
Land use and planning	NI	—	—	—
Minerals	LTS	—	—	—
Noise	LTS	▼	▼	—
Population and Housing	—	—	—	—
Public Services	NI	—	—	—
Recreation and Parks	NI	—	—	—
Transportation and traffic	LTS	▼	▼	—
Utilities and service systems	NI	—	—	—
Meets all project objectives?	Yes	No	No	Yes

△ Alternative is likely to result in greater impacts to issue when compared to proposed project, but impacts are still less than significant.

— Alternative is likely to result in similar impacts to issue when compared to proposed project.

▼ Alternative is likely to result in reduced impacts to issue when compared to proposed project.

NI = No Impact; LTS = less than significant impact SU = significant, unavoidable impact

As indicated in Table ES-2, the No Project Alternative would result in the least environmental impacts, and based on this would be considered the environmentally superior alternative. However, Section 15126.6(e)(2) of the CEQA Guidelines states that if the environmentally superior alternative is the No Project Alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.

Of the alternatives evaluated above, the Adaptive Reuse Alternative would result in the least environmental impacts, and based on this would be considered the environmentally superior

alternative. However, the Adaptive Reuse Alternative does not meet the major goal of the project because it would not allow CBU to fully utilize the site. While relocation would meet all major goals, it is considered infeasible due to technical constraints with moving the building. Therefore, no feasible alternatives have been identified that meet the project goals. All alternatives are rejected in favor of the proposed project.

## TABLE OF CONTENTS

---

<b>CHAPTER 1.0: INTRODUCTION.....</b>	<b>1.0-1</b>
1.1 Purpose and Scope .....	1.0-1
1.2 Compliance with CEQA .....	1.0-7
1.2.1 Format .....	1.0-7
1.2.2 Environmental Procedures .....	1.0-8
1.2.3 Incorporation by Reference.....	1.0-10
1.2.4 NOP Comment Letters, City Planning Commission Workshop.....	1.0-10
<b>CHAPTER 2.0: PROJECT DESCRIPTION .....</b>	<b>2.0-1</b>
2.1 Project Location .....	2.0-1
2.2 Project Background and Objectives.....	2.0-1
2.2.1 CBU Riverside Campus.....	2.0-1
2.2.2 Previous Approvals .....	2.0-2
2.2.3 Project Site .....	2.0-2
2.2.4 Need for Project .....	2.0-3
2.2.5 Project Objectives .....	2.0-3
2.3 Project Characteristics .....	2.0-4
2.3.1 California Environmental Quality Act Baseline .....	2.0-4
2.3.2 Proposed Project .....	2.0-4
2.3.3 Project Design Features and Construction Measures.....	2.0-11
2.4 Discretionary Actions .....	2.0-11
2.4.1 City of Riverside.....	2.0-12
2.4.2 Regional Water Quality Control Board, Santa Ana Region .....	2.0-12
2.4.3 South Coast Air Quality Management District.....	2.0-12
<b>CHAPTER 3.0: EFFECTS FOUND NOT TO BE SIGNIFICANT.....</b>	<b>3.0-1</b>
3.1 Effects Found Not to Be Significant During Preparation of the Notice of Preparation (NOP) .....	3.0-1
3.2 Effects Found Not to Be Significant as Part of the EIR Process .....	3.0-5
3.3 Effects Found to Be Less Than Significant with Mitigation Measures Incorporated.....	3.0-5
3.4 Effects Found to Be Significant Even with Mitigation Measures Incorporated .....	3.0-5
3.5 References.....	3.0-5
<b>CHAPTER 4.0: ENVIRONMENTAL IMPACT ANALYSIS.....</b>	<b>4.0-1</b>
4.1 Air Quality .....	4.1-1
4.1.1 Setting .....	4.1-1

## TABLE OF CONTENTS

---

4.1.2	Thresholds of Significance .....	4.1-15
4.1.3	Project Elements That Can Reduce Impacts .....	4.1-18
4.1.4	Environmental Impacts Before Mitigation .....	4.1-18
4.1.5	Mitigation Measures .....	4.1-23
4.1.6	Environmental Impacts After Mitigation Is Incorporated .....	4.1-23
4.1.7	References .....	4.1-24
4.2	Biological Resources .....	4.2-1
4.2.1	Setting .....	4.2-1
4.2.2	Thresholds of Significance .....	4.2-4
4.2.3	Project Elements that Can Reduce Impacts .....	4.2-4
4.2.4	Environmental Impacts before Mitigation .....	4.2-4
4.2.5	Mitigation Measures .....	4.2-7
4.2.6	Environmental Impacts after Mitigation is Incorporated .....	4.2-8
4.2.7	References .....	4.2-8
4.3	Cultural Resources .....	4.3-1
4.3.1	Setting .....	4.3-1
4.3.2	Thresholds of Significance .....	4.3-12
4.3.3	Project Elements That Can Reduce Impacts .....	4.3-12
4.3.4	Environmental Impacts Before Mitigation .....	4.3-12
4.3.5	Mitigation Measures .....	4.3-17
4.3.6	Environmental Impacts After Mitigation Is Incorporated .....	4.3-18
4.3.7	References .....	4.3-18
4.4	Greenhouse Gases .....	4.4-1
4.4.1	Setting .....	4.4-1
4.4.2	Thresholds of Significance .....	4.4-14
4.4.3	Project Elements That Can Reduce Impacts .....	4.4-17
4.4.4	Environmental Impacts Before Mitigation .....	4.4-17
4.4.5	Mitigation Measures .....	4.4-20
4.4.6	Environmental Impacts After Mitigation Is Incorporated .....	4.4-20
4.4.7	References .....	4.4-21
4.5	Hazards and Hazardous Materials .....	4.5-1
4.5.1	Setting .....	4.5-1
4.5.2	Thresholds of Significance .....	4.5-8
4.5.3	Project Elements That Can Reduce Impacts .....	4.5-9
4.5.4	Environmental Impacts Before Mitigation .....	4.5-9
4.5.5	Mitigation Measures .....	4.5-11
4.5.6	Environmental Impacts After Mitigation Is Incorporated .....	4.5-11
4.5.7	References .....	4.5-11
4.6	Noise .....	4.6-1

4.6.1	Setting .....	4.6-1
4.6.2	Thresholds of Significance .....	4.6-10
4.6.3	Project Elements That Can Reduce Impacts .....	4.6-10
4.6.4	Environmental Impacts Before Mitigation .....	4.6-10
4.6.5	Mitigation Measures .....	4.6-15
4.6.6	Environmental Impacts After Mitigation Is Incorporated .....	4.6-15
4.6.7	References .....	4.6-15
4.7	Traffic .....	4.7-1
4.7.1	Setting .....	4.7-1
4.7.2	Related Regulations .....	4.7-5
4.7.3	Thresholds of Significance .....	4.7-8
4.7.4	Project Elements That Can Reduce Impacts .....	4.7-9
4.7.5	Environmental Impacts Before Mitigation .....	4.7-9
4.7.6	Mitigation Measures .....	4.7-14
4.7.7	References .....	4.7-14
<b>CHAPTER 5.0: MANDATORY CEQA TOPICS .....</b>		<b>5.0-1</b>
5.1	Introduction .....	5.0-1
5.1.1	Significant Unavoidable Environmental Effects .....	5.0-1
5.1.2	Significant Irreversible Changes .....	5.0-2
<b>CHAPTER 6.0: CUMULATIVE IMPACT ANALYSIS .....</b>		<b>6.0-1</b>
6.1	Introduction .....	6.0-1
6.2	Cumulative Analysis Setting .....	6.0-1
6.3	Cumulative Forecasting Methodology .....	6.0-2
6.3.1	Related Projects .....	6.0-2
6.4	Assessment of Cumulative Impacts .....	6.0-3
6.4.1	Air Quality .....	6.0-3
6.4.2	Biological Resources .....	6.0-5
6.4.3	Cultural Resources .....	6.0-5
6.4.4	Greenhouse Gas Emissions .....	6.0-6
6.4.5	Hazards and Hazardous Materials .....	6.0-7
6.4.6	Noise .....	6.0-8
6.4.7	Traffic .....	6.0-8
6.5	References .....	6.0-9
<b>CHAPTER 7.0: PROJECT ALTERNATIVES .....</b>		<b>7.0-1</b>
7.1	Introduction .....	7.0-1
7.2	Project Objectives .....	7.0-1
7.3	Alternatives Under Consideration .....	7.0-2
7.3.1	No Project Alternative .....	7.0-6

## TABLE OF CONTENTS

---

7.3.2	Alternative 1 – Adaptive Reuse .....	7.0-9
7.3.3	Alternative 2 – Relocation .....	7.0-11
7.4	Evaluation of Alternatives .....	7.0-15
7.5	Environmentally Superior Alternative .....	7.0-16
7.6	References .....	7.0-16
<b>CHAPTER 8.0: GROWTH-INDUCING IMPACTS .....</b>		<b>8.0-1</b>
<b>CHAPTER 9.0: LIST OF PREPARERS .....</b>		<b>9.0-1</b>
9.1	City of Riverside .....	9.0-1
9.2	California Baptist University .....	9.0-1
9.3	LSA Associates, Inc. (Draft EIR Preparation) .....	9.0-1
9.4	Technical Analyses .....	9.0-1
9.4.1	Air Quality and Greenhouse Gas Technical Report .....	9.0-1
9.4.2	Biological Technical Report .....	9.0-1
9.4.3	Cultural Resources Survey and Evaluation .....	9.0-2
9.4.4	Phase I Environmental Site Assessment .....	9.0-2
9.4.5	Noise Technical Report .....	9.0-2
9.4.6	Traffic Analysis .....	9.0-2
 <b>APPENDICES</b>		
APPENDIX A:	INITIAL STUDY AND NOTICE OF PREPARATION	
APPENDIX B:	AIR QUALITY AND GREENHOUSE GAS EMISSIONS ANALYSIS	
APPENDIX C:	MSHCP CONSISTENCY REPORT	
APPENDIX D:	CULTURAL RESOURCES IMPACTS REPORT	
APPENDIX E:	PHASE 1 ENVIRONMENTAL SITE ASSESSMENT	
APPENDIX F:	NOISE IMPACT ANALYSIS	
APPENDIX G:	TRAFFIC IMPACT ANALYSIS	

**LIST OF FIGURES**

Figure 1.0-1	Regional and Project Location.....	1.0-3
Figure 1.0-2	Project Site .....	1.0-5
Figure 2.0-1	Site Layout .....	2.0-5
Figure 2.0-2	1997 Sanctuary West and North Elevations .....	2.0-7
Figure 2.0-3	Fellowship Hall Elevations .....	2.0-9
Figure 4.6-1	Noise/Land Use Noise Compatibility Criteria.....	4.6-5

## LIST OF TABLES

Table 1.0-1 Summary of Comments Received in Response to the NOP and City of Riverside Planning Commission Workshop .....	1.0-11
Table 2.0-1 Summary of Project Construction Measures .....	2.0-11
Table 4.1-1 Ambient Air Quality Standards .....	4.1-7
Table 4.1-2 Basin Attainment Classification .....	4.1-12
Table 4.1-3 Ambient Air Quality Data (parts per million unless otherwise indicated) .....	4.1-14
Table 4.1-4 Frequency of Air Quality Standard Violations.....	4.1-14
Table 4.1-5 SCAQMD Air Quality Significance Thresholds .....	4.1-16
Table 4.1-6 Phase I Construction Equipment .....	4.1-19
Table 4.1-7 Project Estimated Maximum Daily Construction Emissions (pounds/day) .....	4.1-20
Table 4.1-8 LST Modeling Results – Phase I .....	4.1-22
Table 4.4-1 GHG Sources in California .....	4.4-2
Table 4.4-2 Community GHG Emissions .....	4.4-3
Table 4.4-3 Project GHG Emissions.....	4.4-18
Table 4.4-4 Consistency with Green Action Plan Goals .....	4.4-19
Table 4.5-1 Review of Historical Aerial Photographs and Topographic Maps.....	4.5-2
Table 4.6-1 Typical Sound Levels in the Environment and Industry .....	4.6-3
Table 4.6-2 Exterior Noise Limits .....	4.6-8
Table 4.6-3 Construction Equipment Noise Emission Levels .....	4.6-12
Table 4.7-1 Level of Service Criteria for Signalized Intersections .....	4.7-3
Table 4.7-2 Level of Service Criteria for Unsignalized Intersections .....	4.7-3
Table 4.7-3 Existing Intersection Operations .....	4.7-4
Table 4.7-4 Existing Conditions Roadway Operations.....	4.7-4
Table 4.7-5 City of Riverside Intersection Level of Service Standards .....	4.7-8
Table 4.7-6 City of Riverside Roadway Capacity Standards .....	4.7-8
Table 4.7-7 Construction Vehicle Trip Generation .....	4.7-10
Table 4.7-8 Construction Passenger Car Equivalent (PCE) Generation.....	4.7-11
Table 4.7-9 Existing Plus Project Intersection Operations .....	4.7-12
Table 4.7-10 Existing Plus Project Roadway Operations.....	4.7-13
Table 6.0-1 Cumulative Projects.....	6.0-2

Table 7.0-1 Summary of No Project Alternative Success at Meeting Project Objectives.....	7.0-8
Table 7.0-2 Summary of Alternative 1 Success at Meeting Project Objectives.....	7.0-11
Table 7.0-3 Summary of Alternative 1 Success at Meeting Project Objectives.....	7.0-15
Table 7.0-4 Summary of Comparison of Alternatives Impacts .....	7.0-15

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## CHAPTER 1.0 INTRODUCTION

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### 1.1 PURPOSE AND SCOPE

The purpose of this Draft Environmental Impact Report (DEIR) is to disclose the potential environmental consequences of the proposed Riverside Free Methodist Church (RFMC) Demolition Project (proposed project). The general location of the proposed project is illustrated in Figure 1-1, Regional and Project Location, and Figure 1-2, Project Site. The RFMC Demolition Project constitutes a “project” as defined in the State California Environmental Quality Act (CEQA) Guidelines Section 15378. The City of Riverside (City) is the Lead Agency in preparing this DEIR in accordance with California Environmental Quality Act of 1970 statutes (California Public Resources Code, Section 21000 et seq.) and implementing State CEQA Guidelines (14 CCR 15000 et seq.). (All further references are to the State CEQA Guidelines.)

The approximately 3.14-acre project site is located at 8431 Diana Avenue in Riverside, California, approximately 107 feet north of State Route 91 (SR-91). The site is bounded by academic facilities and residential units associated with California Baptist University (CBU ) to the north, west, and east; additional residential units and commercial space to the northeast and east; and Diana Avenue to the south.

The proposed project is the demolition of existing structures at the site by CBU. The proposed project is within the CBU Specific Plan (CBUSP) and is occupied by the RFMC. The CBUSP was approved by the Riverside City Council on March 26, 2013. A Mitigated Negative Declaration (MND) was approved with the CBUSP in accordance with CEQA. However, CBU did not own the property at the time the MND was adopted for the CBUSP. Consequently, the demolition of the existing structures on site for the purposes of implementing the CBUSP was not analyzed in the MND. CBU subsequently acquired the property after the MND was adopted. The JM Research and Consulting (JMRC)<sup>1</sup> report prepared for the CBUSP found RFMC eligible for Structure of Merit status and, based on this, Title 20 defines the property as a Cultural Resource, which is a historic resource under CEQA. The demolition of the RFMC is being analyzed at the EIR level due to the potentially significant historical status of the RFMC. In addition, several other topics (Air Quality, Biological Resources, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Noise, and Transportation and Traffic) were not fully analyzed in the proposed project’s Initial Study (IS) as the technical studies on which the analysis in the IS relied were not complete. These topics are fully analyzed in this DEIR. Any future development on the project site will be subject to the CBUSP.

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<sup>1</sup> JM Research and Consulting (JMRC), *Cultural Resources Survey, California Baptist University Specific Plan*, 2012 (excerpted in Wilkman Historical Services Report).

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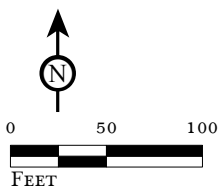


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FIGURE 1-2

LSA



- Project Location
- Buildings

*Riverside Free Methodist  
Church Demolition Project  
Environmental Impact Report*

Project Site

SOURCE: Google Earth, 2014; Riverside County, 2014

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CBU has recently determined that the proposed project site will become the location of an event center. In accordance with the CBUSP and the associated MND, the event center is conditionally permitted subject to the granting of a minor Conditional Use Permit. To evaluate and mitigate any potential negative environmental impacts adequately, environmental review of the event center will be performed pursuant to CEQA, the CBUSP, and the associated MND.

The proposed project will consist of site clearing, building removal, and rough grading and will take approximately 28 workdays occurring over two to three months. The proposed project is anticipated to occur in the latter half of 2015. The church facility has been served by an on-site septic system. This system will also be removed under the proposed project and any future development will be connected to the City's sewer system at the time of construction.

An EIR is an informational document “which will inform public agency decision-makers and the public generally of the significant environmental effect of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project” (Section 15121). The purpose of this DEIR is to present the evaluation of the anticipated significant environmental effects of the proposed project, identify existing processes or measures to minimize the significant effects, and evaluate alternatives to the project that would minimize the significant effects.

This DEIR is intended for use by decision-makers (i.e., Cultural Heritage Board, City Planning Commission, and City Council), other public agencies, and the general public. It provides relevant information concerning the potential environmental effects associated with the RFMC Demolition Project.

## **1.2 COMPLIANCE WITH CEQA**

### **1.2.1 Format**

Section 1.0 of this DEIR sets forth the summary requirements of CEQA as required by Section 15123 of the State CEQA Guidelines and provides a statement of the document's purpose and intended use (Section 1.1). Section 2.0 of this DEIR contains the project description, the project location, the project objectives, and project characteristics.

Issues found to have no impact or less than significant impact in the Initial Study (IS) prepared by the City for the proposed project are provided in Appendix A of this document and summarized in Section 3.0. This DEIR has been formatted to address the issues found to be potentially significant in the IS. There is a corresponding DEIR section for each issue area found to be potentially significant in the IS. Each DEIR section includes an existing setting discussion that describes the physical environmental conditions within the project area as they existed at the time the Notice of Preparation (NOP) was prepared; this is considered the baseline physical

condition by which the City determines whether an impact is considered to be significant (Section 15125(a)). The proposed project's NOP was issued on December 2, 2014, for a 30-day public review period that ended on January 2, 2015. Each DEIR section includes an analysis performed to determine the amount and degree of impact that is associated with the project. For all significant environmental impacts, mitigation measures, where feasible, are implemented in order to reduce the impacts to a less than significant level.

The analysis of impacts and identification of mitigation measures are derived from technical reports that are included as technical appendices to this document and from other informational resources as listed in the references section of this document.

### 1.2.2 Environmental Procedures

The basic purposes of CEQA are to:

1. Inform governmental decision-makers and the public about the potential, significant environmental effects of proposed activities;
2. Identify the ways that environmental damage can be avoided or significantly reduced;
3. Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible; and
4. Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved (Section 15002).

The EIR document typically consists of three parts: (1) the NOP (including the IS); (2) DEIR; and (3) Final EIR (FEIR). Pursuant to Section 15063, the City prepared an IS (Environmental Checklist) for the proposed project in order to determine if the project would have a significant effect on the environment. The NOP was intended to encourage interagency communication concerning the proposed action and provide sufficient background information about the proposed action so that agencies, organizations, and individuals could respond with specific comments and questions on the scope and content of the DEIR. Based upon the findings of fact contained within the NOP/IS, the City concluded that an EIR should be prepared. The NOP for an EIR and a description of potential adverse impacts were distributed to the State Clearinghouse (SCH), responsible agencies, adjacent property owners, and other interested parties on December 2, 2014. Pursuant to Section 15082, recipients of the NOP were requested to provide responses within 30 days after their receipt of the NOP. After the 30-day public review period of the NOP, which ended on January 2, 2015, a total of six response letters had been received by the City (including a letter from the SCH confirming it received and forwarded the NOP materials to

applicable State agencies for review). The SCH has numbered the project SCH No. 2014121011. Copies of the NOP (including the IS), NOP response letters, and the NOP distribution list are located in Appendix A. All comments received during the NOP public notice period were considered during the preparation of this DEIR.

Based on the scope of analysis for this DEIR, including comments received during the NOP public comment period, the following issues were determined to be potentially significant and are therefore addressed in Sections 4.0–4.7 of this document:

- Air Quality;
- Biological Resources;
- Cultural Resources;
- Greenhouse Gas Emissions;
- Hazards and Hazardous Materials;
- Noise; and
- Transportation and Traffic.

Other potential environmental impact areas, including aesthetics, land use and planning, population and housing, agriculture and forest resources, mineral resources, public services, utilities and service systems, geology and soils, hydrology and water quality, and recreation, were not found to be significant based on the results of the IS. These issues are addressed in Section 3.0 of this DEIR.

As the lead agency for the proposed project, the City has assumed responsibility for preparing this document. The decision to consider the proposed project is within the purview of the City Cultural Heritage Board, Planning Commission, and City Council. The City will use the information included in this DEIR to consider potential impacts to the physical environment associated with the project when considering approval of the project. As set forth in Section 15021 of the State CEQA Guidelines, the City, as lead agency, has the duty to avoid or minimize environmental damage where feasible. Furthermore, Section 15021(d) states that:

CEQA recognizes that in determining whether and how a project should be approved, a public agency has an obligation to balance a variety of public objectives, including economic, environmental, and social factors and in particular the goal of providing a decent home and satisfying living environment for every Californian. An agency shall prepare a statement of overriding considerations as described in Section 15093 to reflect the ultimate balancing of

competing public objectives when the agency decides to approve a project that will cause one or more significant effects on the environment.

In accordance with CEQA, the Lead Agency will be required to make findings for each environmental impact of the project that cannot be mitigated to below a level of less than significant. If the Lead Agency determines that the benefits of the proposed project outweigh unmitigated, significant environmental effects, it will be required to adopt a Statement of Overriding Considerations stating the reasons supporting its action notwithstanding the project's significant environmental effects.

The DEIR will be made available for review to the public and public agencies for 45 days to provide comments on the “sufficiency of the document in identifying and analyzing the possible impacts on the environment and ways in which the significant effects of the project might be avoided or mitigated” (14 CCR Section 15204).

### **1.2.3 Incorporation by Reference**

Information provided in the (1) Environmental Impact Report for the City of Riverside General Plan 2025 (State Clearinghouse Number 2004021108; certified by the City in November 2007) (General Plan 2025 EIR), (2) Findings and Statement of Overriding Considerations for the General Plan 2025 EIR, (3) Addendum to the General Plan 2025 Final EIR, and (4) Second Addendum to the General Plan 2025 Final EIR, were reviewed in order to assist environmental review of the proposed project. Accordingly, these documents are incorporated by reference. (Section 15150). These documents are available for review at the Riverside City Hall Planning Division, 3900 Main Street, Riverside, California 92522; the City of Riverside Main Library 3581 Mission Inn Avenue, Riverside, California 92501; and on the City's website at [www.riversideca.gov](http://www.riversideca.gov).

### **1.2.4 NOP Comment Letters**

The public review period for the NOP/IS began on December 2, 2014, and ended on January 2, 2015. The agencies and individuals that commented on the NOP/IS and a brief summary of the issues raised are presented in Table 1-1, Summary of Comments Received in Response to the NOP. None of the comments received changed the issue areas that the IS determined would be discussed in the DEIR. In fact, all of the issues and concerns raised in the comments have been fully addressed and analyzed in the DEIR. Copies of the comment letters are included in Appendix A.

**Table 1-1**  
**Summary of Comments Received in Response to the NOP**

Date	Written or Verbal Comment	Commenting Agency or Property Owner	Summary of Comment
December 2, 2014	Written	California Office of Planning and Research, State Clearinghouse (SCH)	Confirmed receipt of NOP and IS materials. Provided a list of state agencies that the NOP and IS materials were transmitted to. Set the NOP review period from December 2 to December 31, 2014.
December 5, 2014	Written	Native American Heritage Commission (NAHC)	<p>The NAHC states that the project is subject to California Government Code Sections 65040.2, 65352.3 et seq.</p> <p>The NAHC recommends the following:</p> <ul style="list-style-type: none"> <li>• Contact the appropriate Information Center for a record search.</li> <li>• If an additional archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.</li> <li>• Contact the NAHC for a Sacred Lands File Check and a list of appropriate Native American contacts for consultation concerning the project site and to assist with mitigation measures.</li> <li>• Include mitigation plan provisions for the identification and evaluation of accidentally discovered archaeological resources, pursuant to CEQA § 15064.5(f).</li> <li>• Include mitigation plan provisions for the disposition of recovered cultural items that are not burial associated, which are addressed in Public Resources Code (PRC) §5097.98, in consultation with culturally affiliated Native Americans.</li> <li>• Include provisions for discovery of Native American human remains in mitigation plan. Health and Safety Code § 7050.5, CEQA §15064.5(e), and Public Resources Code §5097.98 address the process to be followed in the event an accidental discovery of any human remains and associated grave goods in a location other than a dedicated cemetery.</li> </ul>

**Table 1-1**  
**Summary of Comments Received in Response to the NOP**

Date	Written or Verbal Comment	Commenting Agency or Property Owner	Summary of Comment
December 10, 2014	Written	South Coast Air Quality Management District (SCAQMD)	<p>SCAQMD requested a copy of the DEIR and all appendices or technical documents related to air quality and greenhouse gas analyses and electronic versions of all air quality modeling and health risk assessment files.</p> <p>SCAQMD also suggested the following:</p> <ul style="list-style-type: none"> <li>• Use of the SCAQMD-approved Air Quality Handbook (1993) to assist in the preparation of the air quality analysis.</li> <li>• Use CalEEMod land use emissions software.</li> <li>• Identification of any potential adverse air quality impacts that could occur from all phases of the proposed project including indirect sources, and all air pollutant sources related to the proposed project.</li> <li>• Calculation of localized air quality impacts and a comparison to the localized significance thresholds.</li> <li>• Preparation of a mobile source health risk assessment for projects generating or attracting vehicular trips, particularly in relation to heavy-duty diesel-fueled vehicles.</li> <li>• Identification of feasible mitigation measures to minimize or eliminate significant adverse air quality impacts.</li> </ul>
December 22, 2014	Written	California Department of Transportation (Caltrans)	Caltrans states that the project will have no lasting effects on the State Highway System (SHS) and therefore has no further comments. Caltrans requests, however, that if the project is modified in any way that copies of revised plans be forwarded to Caltrans so that they may re-evaluate potential impacts to the SHS.
December 31, 2014	Written (via email)	Riverside County Airport Land Use Commission (ALUC)	The ALUC agrees with the statement in the Initial Study that the project will have a less than significant impact on airports and aviation, and that this issue need not be addressed in the Environmental Impact Report.
February 6, 2015	Written (via email)	Sempra Utilities	Sempra states that the Southern California Gas Company Transmission Department does not operate facilities within the proposed project site. However, their Northwest Distribution Region may have some distribution facilities within the project's construction area. Sempra requests that the Northwest Distribution Region be contacted to ensure there is no conflict with their pipeline system.

## **CHAPTER 2.0**

### **PROJECT DESCRIPTION**

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This section describes the objectives of the Riverside Free Methodist Church (RFMC) Demolition Project (proposed project) Draft Environmental Impact Report (DEIR) and provides a detailed description of project characteristics. This section also discusses the discretionary actions required for the project to go forward and gives a brief description of the environmental effects, which are evaluated in Chapter 3.0, Effects Found not to be Significant, through Chapter 6.0, Cumulative Impacts, of this DEIR.

#### **2.1 PROJECT LOCATION**

The approximately 3.14-acre project site is located at 8431 Diana Avenue in Riverside, California, in the southeast portion of the California Baptist University (CBU) Riverside campus, approximately 107 feet north of State Route 91 (SR-91). The site is bounded by academic facilities associated with CBU to the north, west, and east, and Diana Avenue to the south. See previously referenced Figure 1-1, Regional and Project Location; and Figure 1-2, Project Site.

The uses adjacent to the proposed project site are CBU facilities planning and services to the north; SR-91 to the south; a CBU recreation center, a CBU wellness center, Lancer Plaza, and commercial retail space (Harbor Freight) to the east; and CBU student housing (Lancer Arms apartments) to the west. Aside from SR-91, all uses directly surrounding the RFMC are on properties owned by CBU. Farther to the north and west, the site is surrounded by more CBU uses, including another student housing complex to the north. Residential uses and a smaller area of general commercial uses are located farther east on both sides of Adams Street. General commercial uses are located south of SR-91, including a used car dealership. The proposed project consists of Assessor's Parcel Number (APN) 231-070-007. The latitude and longitude of the approximate center of the site is 33°55'37.40"N and 117°25'22.03"W. The site is within Sections 5 and 8 of Township 3 South, Range 5 West of the *Riverside, California* 7.5-minute quadrangle, San Bernardino Baseline and Meridian, as mapped by the U.S. Geological Survey (USGS).

#### **2.2 PROJECT BACKGROUND AND OBJECTIVES**

##### **2.2.1 CBU Riverside Campus**

In 1950, the Los Angeles Baptist Association opened the doors of California Baptist College in El Monte. In 1955, the college relocated to the Riverside campus. Today, CBU is one of the top private Christian liberal arts colleges and universities in Southern California offering bachelor's, master's, and credential programs in their Riverside and San Bernardino campuses and online. The 156.4-acre Riverside main campus contains Spanish-style buildings accommodating

classrooms, campus housing, a library, offices, and maintenance and athletic facilities. In the midst of dynamic growth, CBU continues the tradition of education in a Christian environment.

### 2.2.2 Previous Approvals

In 2013, the City of Riverside adopted a Mitigated Negative Declaration (MND) for the CBU Specific Plan (CBUSP). The CBUSP purpose is “to establish a vision and context for future development at CBU that ensures an enduring and identifiable dynamic visual image for both the campus and the community, and recognizes the historic resources of the campus and the adjoining Magnolia Avenue Specific Plan (MASP)/Magnolia Heritage District that contribute to the cultural richness of the University.”<sup>1</sup> The MND evaluated potential impacts from the CBUSP project associated with aesthetics, biological resources, greenhouse gas emissions, air quality, land use planning, population and housing, transportation, cultural resources, hazards and hazardous materials, utility services, public services, geology and soils, hydrology, noise, and recreation. The technical, economic, and environmental characteristics evaluated in the MND remain relevant to the proposed project with the exception of an impact upon a cultural resource.

The proposed project is within the CBUSP and is occupied by the RFMC. However, CBU did not own the property at the time the MND was adopted. Consequently, the demolition of the church facility on site for the purposes of implementing the CBUSP was not analyzed in the MND since CBU acquired the property after the MND was adopted. The JM Research and Consulting (JMRC)<sup>2</sup> report prepared for the CBUSP found RFMC eligible for Structure of Merit status and, based on this, Title 20 defines the property as a Cultural Resource, which is a historic resource under CEQA. The demolition of the RFMC is being analyzed at the EIR level due to the potentially significant historical status of the RFMC. In addition, several other topics (Air Quality, Biological Resources, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Noise, and Transportation and Traffic) were not fully analyzed in the proposed project’s Initial Study (IS) as the technical studies on which the analysis in the IS relied were not complete. These topics are fully analyzed in this DEIR. The proposed project does not identify a replacement use at this time. Any future use shall be consistent with the uses allowed in the CBUSP.

### 2.2.3 Project Site

As discussed previously, land uses on the CBU campus are currently regulated by a Specific Plan adopted by the City of Riverside in 2013. The project site is within the CBUSP and is zoned as Mixed Use/Urban. The proposed project site is developed as a church facility with a 3,942-square foot main sanctuary building and 2,340-square foot fellowship hall both

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<sup>1</sup> California Baptist University Specific Plan, Adopted March 2013, Page 1.

<sup>2</sup> JM Research and Consulting (JMRC), *Cultural Resources Survey, California Baptist University Specific Plan*, 2012 (excerpted in Wilkman Historical Services Report).

constructed in 1963–64, and a 3,360-square foot education building constructed in 1979. The site also contains a paved parking lot, concrete walkways, ornamental landscaping, a tot lot, and an undeveloped portion of land at the north end of the parcel.

### **2.2.4 Need for Project**

The reason for the proposed demolition and grading project is to prepare the site for a future use consistent with the objectives of the CBUSP. As discussed previously, impacts associated with the demolition of existing buildings were not addressed in the MND because CBU did not own the property at the time. As stated in the CBUSP, the Purpose and Intent of the Specific Plan is to:

- Guide and accommodate the anticipated future growth of the CBU Campus;
- Enhance and support the CBU Community, including academics, student organizations, and athletics;
- Establish and maintain an appropriate and viable mix of land uses;
- Encourage sustainable development;
- Enhance and increase mobility on and off campus;
- Provide pedestrian amenities and consistent design quality;
- Focus on safety and security through environmental design;
- Preserve and maintain significant cultural resources;
- Strengthen campus identity through intelligent design and high quality development and aesthetics;
- Foster economic development; and
- Streamline the project entitlement process.

### **2.2.5 Project Objectives**

The overall project goal is to prepare a site for future use consistent with the CBUSP. The project objectives are as follows:

- Prepare a site in order to maximize future use by CBU, in accordance with the approved CBU Specific Plan.
- Accommodate future growth of the CBU campus.
- Remove an on-site septic system to enhance the use of the property and to facilitate a future sewer connection.

## **2.3 PROJECT CHARACTERISTICS**

### **2.3.1 California Environmental Quality Act Baseline**

The proposed project site consists of 3.14 acres and is developed as a church facility with a 3,942-square foot main sanctuary and 2,340-square foot fellowship hall constructed in 1963–64 and a 3,360-square foot education building constructed in 1979. The site contains improvements consisting of a paved parking lot, concrete walkways, ornamental landscaping a tot lot, and undeveloped area. Figure 2-1 depicts the existing structures on site. Figure 2-2 shows a photograph of the church sanctuary building north and west elevations. Figure 2-3 shows photographs of the Fellowship Hall building west, south, north, and east elevations. For purposes of analysis in the DEIR, the site condition at the time of the release of the Notice of Preparation (NOP) is considered the existing environmental baseline. When the NOP was released in December 2014, the RFMC congregation still occupied the property and held regularly scheduled activities. No changes to the character of the site are expected to occur after the RFMC congregation moves are prior to implementation of the proposed project.

### **2.3.2 Proposed Project**

The proposed demolition project will consist of site grubbing and clearing; building demolition, salvage, and removal; removal of an on-site septic system; and rough grading. Project activities will take approximately 28 work days occurring over a period of two to three months. The proposed project is anticipated to occur in the latter half of 2015. The church facility has been served by an on-site septic system. This system will be removed under the proposed project and will not be replaced at this time. Future development (in accordance with the CBUSP) will need to be connected to the City's sewer system.

The demolition activities associated with the project are:

- Tree and landscape removal;
- Existing structure hazardous materials abatement;
- Removal of the on-site septic system;
- Existing structure demolition; and
- Hardscape and foundations demolition.

Tree and landscape removal and existing structure hazardous materials abatement will occur concurrently, the former lasting three days and the latter 10 days. Next, existing structure demolition will occur over approximately five days. Demolition of hardscape and foundations will follow, taking approximately 10 days.



LSA

FIGURE 2-1

*Riverside Free Methodist  
Church Demolition Project  
Environmental Impact Report*

Site Layout

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LSA

FIGURE 2-2

*Riverside Free Methodist  
Church Demolition Project  
Environmental Impact Report*

1997 Sanctuary West and North Elevations

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FIGURE 2-3

*Riverside Free Methodist Church Demolition Project  
Environmental Impact Report  
Fellowship Hall Elevations*

SOURCE: Wilkman Historical Services, 2014

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### 2.3.3 Project Construction Measures

Demolition activities will be performed by qualified contractors, and contract documents, plans, and specifications will incorporate stipulations regarding standard legal requirements and acceptable practices including, but not limited to, traffic control during demolition activities, days and hours when demolition will take place, water quality protection and erosion and sedimentation control, demolition-related solid waste, and hazardous materials handling during demolition. The proposed demolition activities will be conducted in accordance with the Riverside Municipal Code and other applicable requirements. These requirements are included in Table 2-1, Summary of Project Construction Measures, and referenced throughout the impact discussions in Sections 4.1–4.7 of the DEIR.

**Table 2-1  
Summary of Project Construction Measures**

Subject Area	Construction Measure
Traffic control during construction activities	The applicant shall prepare a traffic control plan that will specifically address construction traffic and possible lane closures within the City's public rights-of-way on Diana Avenue. The traffic control plan shall be prepared and approved by the City prior to issuance of a demolition and/or grading permit. The traffic control plan will include provisions for construction times and control plans for allowance of motorists, bicyclists, pedestrians, and bus access throughout construction. This traffic control plan will also include provisions to ensure emergency vehicle passage at all times, and will include signage and flagmen when necessary. The traffic control plan will include provisions for coordinating with local school hours and emergency service providers regarding construction times.
Noise	Demolition activities shall occur Monday through Friday from 7:00 a.m.–7:00 p.m., on Saturdays from 8:00 a.m.–5:00 p.m., and shall not occur on state and federal holidays (in compliance with the City's Municipal Code, Section 7.35).
Water quality protection and erosion and sedimentation control	In compliance with the National Pollution Discharge Elimination System (NPDES), the applicant shall prepare a Storm Water Pollution Prevention Plan (SWPPP) that specifies Best Management Practices (BMPs) to be implemented during project demolition activities. The purpose of the SWPPP shall be to prevent demolition-related pollutants from contacting storm water and to control erosion and sedimentation. The SWPPP will be prepared and submitted to the Regional Water Quality Control Board (RWQCB) for review and approval prior to the start of construction.
Demolition-related solid waste	The project applicant shall designate a solid waste management coordinator who will work with demolition contractors to estimate quantities of each type of material that is to be salvaged, recycled, or disposed of as waste; oversee plans for separation of materials; and review procedures for periodic collection and transportation of materials.

## 2.4 DISCRETIONARY ACTIONS

Implementation of the proposed project will require permits or other forms of approval from public agencies or other entities prior to construction of the proposed project. They include, but are not limited to, the following:

### **2.4.1 City of Riverside**

Certification of this DEIR and a Certificate of Appropriateness will be required in order to implement the proposed project. A Certificate of Appropriateness application is required for properties that are designated or eligible for designation in accordance with the criteria set forth in the City's Cultural Resources Ordinance (Title 20 of the Riverside Municipal Code). The Certificate of Appropriateness process is intended to ensure that the historic integrity of these properties is maintained whenever exterior improvements are made. As part of the process, impacts to historic properties are addressed in accordance to CEQA requirements.

### **2.4.2 Regional Water Quality Control Board, Santa Ana Region**

An NPDES Construction General Permit is required for grading activities of one acre or larger. Since the demolition project would also include grading activities to remove hardscape and the septic system resulting in a disturbance of more than one acre of soil, the applicant must file a Notice of Intent with the Regional Water Quality Control Board, Santa Ana Region, and obtain a General Construction Activity Stormwater Permit pursuant to the NPDES regulations established under the Clean Water Act. This permit requires preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP), which is intended to prevent degradation of surface and ground waters during the grading and the demolition process.

### **2.4.3 South Coast Air Quality Management District**

A fugitive dust control plan submitted to the South Coast Air Quality Management District for approval will be required prior to issuance of grading permits (SCAQMD Rule 403).

## CHAPTER 3.0 EFFECTS FOUND NOT TO BE SIGNIFICANT

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### 3.1 EFFECTS FOUND NOT TO BE SIGNIFICANT DURING PREPARATION OF THE INITIAL STUDY (IS)

California Environmental Quality Act (CEQA) provides that an Environmental Impact Report (EIR) shall focus on the significant effects on the environment, discussing the effects with emphasis in proportion to their severity and probability of occurrence. Effects dismissed in an Initial Study (IS) as clearly insignificant and unlikely to occur need not be discussed further in the EIR unless information inconsistent with the finding in the IS is subsequently received.

Section 21100 (c) of the Public Resources Code states that an EIR shall contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and were, therefore, not discussed in detail in the Draft EIR (DEIR) (California Public Resources Code, Section 21000 et seq.). Section 15128 of the State CEQA Guidelines adds, “Such a statement may be contained in an attached copy of an IS.”

The IS (Environmental Checklist) prepared and circulated with the NOP for public review on December 2, 2014, for the proposed project (Appendix A) concluded that the Riverside Free Methodist Church Demolition Project (proposed project) would not result in potentially significant impacts to the following areas:

- **Aesthetics:** The most prominent scenic vistas that can be seen from the western Riverside area are the San Gabriel Mountains and Mount Rubidoux. Due to the topography, landscaping and surrounding buildings, these scenic vistas cannot be seen from the project site. There are no scenic highways within the City that could be potentially affected. The project would not result in a new source of substantial light or glare that would adversely affect day or nighttime views as the project consists of the demolition of existing buildings, which would occur only during daylight hours. No new lighting is proposed or required for the project and no exterior building materials are proposed that would contribute to daytime glare impacts. In addition, the proposed project is not located along or within view of a scenic boulevard, parkway, or special boulevard as designated by the City’s General Plan 2025. There are no nearby scenic vistas. The proposed project consists of demolition of existing buildings within an urbanized area completely surrounded by existing development on a college campus. Therefore, all impacts related to aesthetics are less than significant.
- **Agriculture and Forest Resources:** The project is located within an urbanized area. A review of Figure OS-2 – Agricultural Suitability of the General Plan 2025 reveals the

project site is not designated as, and is not adjacent to or in proximity to any land classified as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency. A review of Figure 5.2-2 – Williamson Act Preserves of the General Plan (GP) 2025 Final Program Environmental Impact Report (FPEIR) reveals that the project site is not located within an area that is affected by a Williamson Act Preserve or under a Williamson Act Contract. Moreover, the project site is not zoned for agricultural use and is not next to land zoned for agricultural use. There are no agricultural resources or operations, including farmlands within proximity of the subject site. Neither the project site nor the entire City of Riverside has any forest land nor is there any timberland. Therefore, the project would have no impact to agricultural and forest resources.

- **Geology and Soils:** The project site does not contain any known fault lines and the potential for fault rupture is low. The San Jacinto Fault Zone, located northeast of the City, and the Elsinore Fault Zone, located south of the City, have the potential to cause moderate to large earthquakes that would cause intense ground shaking. The project site is located in an area with low to moderate liquefaction potential, per the GP 2025 Liquefaction Zones Map – Figure PS-2. The project site is also not located in an area of high shrink-swell potential, per the GP 2025 Soils with High Shrink Swell Potential Map – Figure PS-3. The project site and its surroundings have generally flat topography and are not located in an area prone to landslides, per Figure 5.6-1 of the GP 2025 FPEIR. In summary, the project site is not subject to high risk of landslides, lateral spreading, subsidence, liquefaction, or collapse. Additionally, the project consists of the demolition of existing buildings and does not involve the construction of new buildings or structures. Therefore, it would not expose people or structures to geologic hazards and all impacts would be less than significant.

Erosion and loss of topsoil could occur as a result of the project. State and Federal requirements call for the preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP) establishing erosion and sediment controls for construction activities. The project site includes approximately 3.14 acres and, therefore, must also comply with the National Pollutant Discharge Elimination System (NPDES) regulations. In addition, the project must comply with the City of Riverside Grading Code (Title 17 of the Riverside Municipal Code), which requires the implementation of measures designed to minimize soil erosion. Compliance with State and Federal requirements and Title 17 will ensure that impacts relating to soil erosion or loss of topsoil will be less than significant.

- **Hydrology and Water Quality:** The project site is currently developed with mostly impervious structures and some landscaped areas. The project consists of the demolition of the three existing buildings and will involve site clearing, demolition, and rough grading. The site clearing and grading phases will disturb vegetation and surface soils, potentially resulting in erosion and sedimentation. If left exposed and with no vegetative cover, the site's bare soil would be subject to additional wind and water erosion. Since the project involves over an acre of ground disturbance, the project is subject to NPDES requirements and must implement a Storm Water Pollution Prevention Plan (SWPPP). Implementation of site-specific Best Management Practices (BMPs) as established by the SWPPP will ensure all impacts related to erosion and sedimentation from ground disturbance are less than significant. Furthermore, no new runoff will be generated from the project because it does not involve an increase in impervious surfaces. No existing streams, rivers, or other drainage features exist on the site. Further, drainage patterns on the site would not be altered substantially since the site is already flat and has been previously graded. Urban runoff is currently and will continue to be conveyed by local drainage facilities developed throughout the City to regional drainage facilities, and then ultimately to the receiving waters. The proposed project does not involve any use of groundwater supplies. To address potential water quality issues, the project is required to comply with applicable Federal, State, and local water quality regulations. Compliance with existing regulation will ensure all impacts related to hydrology and water quality will be less than significant.
- **Land Use and Planning:** The project site is located within the CBUSP. The existing zoning for the site is Mixed Use/Urban. The area west of the project site is zoned Mixed Use/Residential and Mixed Use/Academic, zoning to the east is Mixed Use/Urban, and to the north Mixed Use/Academic. The project is currently served by fully improved public streets and other infrastructure and does not involve the subdivision of land or the creation of streets that could alter the existing surrounding pattern of development or an established community. The project site is located within the Western Riverside Multiple Species Habitat Conservation Plan (MSHCP). However, according to the General Plan 2025 Open Space Element Figure OS-7, the project site is not located in any MSHCP habitat core or habitat linkage area. The project only consists of demolition activities, and any potential future use of the site has already been analyzed in the CBUSP MND, which found that the SP was consistent with the City's General Plan. The project would therefore not conflict with any applicable land use plan and impacts related to land use and planning are all less than significant.
- **Mineral Resources:** State-classified Mineral Resource Zones (MRZ) MRZ-2 and MRZ-4 are shown in Figure 5.10-1, Mineral Resources of the GP 2025 FPEIR. The proposed project is located in MRZ-4, which indicates that there is insufficient data to know whether

mineral resources can be found on site. The project site is currently developed with three buildings and surrounding landscaping. The demolition project will not create ground disturbance beyond that which has already occurred. Therefore, the project would have no impact to mineral resources.

- **Population/Housing:** The project is in an urbanized area and does not propose new homes or businesses that would directly induce substantial population growth, and does not involve the addition of new roads or infrastructure that would indirectly induce substantial population growth. No impacts related to population and housing are expected.
- **Public Services:** The proposed project will be adequately served by the City's Fire Department Station 10 and City's Police Department. The proposed project is not an intensification of land use and therefore would not result in an increased demand for school services, parks, and other public facilities. Any future use of the site was already encompassed within the CBUSP. Therefore, no impacts to public services are expected.
- **Recreation:** The proposed project does not include any uses that would increase the existing neighborhood and regional parks, nor does it include plans for the construction of new recreational facilities. Any future use of the site was already encompassed within the CBUSP. Therefore, there would be no impact to recreational facilities under the proposed project.
- **Utilities and Service Systems:** Currently, the church facility at the project site is served by an on-site septic system. The proposed project will remove the septic system. Since the project does not include any connection to wastewater utilities, it will have no effect on demand of wastewater treatment. The project is located on a previously developed site within an urbanized area where no increase in impervious surfaces will occur that would require or result in the construction of new storm water drainage facilities or expansion of existing facilities. The project will not create any demand for water. Therefore, impacts to storm water, wastewater, and water supply utilities would be less than significant.

Debris from the project will be transported to the Badlands Landfill, located east of the City of Moreno Valley. Based on the capacity and daily load of the landfill, it has sufficient permitted capacity to accommodate the project's solid waste disposal needs. The proposed project must comply with the City's waste disposal requirements as well as the California Green Building Code. For these reasons, the project would not conflict with any Federal, State, or local regulations related to solid waste. Therefore, impacts to solid waste are expected to be less than significant.

Therefore, as stated in the IS/NOP, these topics are not addressed further in the DEIR.

### **3.2 EFFECTS FOUND NOT TO BE SIGNIFICANT AS PART OF THE EIR PROCESS**

Based on the analysis provided in this DEIR, the following areas were found to not have significant impacts, with no mitigation measures needed:

- Air Quality; and
- Traffic.

Therefore, no mitigation measures are required.

### **3.3 EFFECTS FOUND TO BE LESS THAN SIGNIFICANT WITH MITIGATION MEASURES INCORPORATED**

Based on the analysis provided in the DEIR, the following areas were found to have less than significant impacts with the incorporation of mitigation measures:

- Biological Resources;
- Greenhouse Gas Emissions;
- Hazards and Hazardous Materials; and
- Noise.

### **3.4 EFFECTS FOUND TO BE SIGNIFICANT EVEN WITH MITIGATION MEASURES INCORPORATED**

Based on the analysis provided in the EIR, the following areas were found to have potentially significant impacts even after feasible mitigation measures were incorporated:

- Cultural Resources.

### **3.5 REFERENCES**

14 CCR 15000–15387 and Appendix A–L. Guidelines for Implementation of the California Environmental Quality Act, as amended.

California Public Resources Code, Section 21000–21177. California Environmental Quality Act, as amended.

City of Riverside. 2007a. *City of Riverside General Plan 2025*. Adopted November 2007. Riverside, California: City of Riverside Community Development Department. Amended November 2012.

DOC (Department of Conservation). 2010. “Unique Farmland and Farmland of Statewide Importance.” Farmland Mapping and Monitoring Program.

DOC (Department of Conservation). 2012. Riverside County Williamson Act Maps FY 2008–2009.

OSHPD (Office of Statewide Health Planning and Development). 2011. “About Us.” Accessed on June 6, 2013: [http://www.oshpd.ca.gov/FDD/About\\_Us/History/Index.html#plnrvw](http://www.oshpd.ca.gov/FDD/About_Us/History/Index.html#plnrvw).

## CHAPTER 4.0 ENVIRONMENTAL IMPACT ANALYSIS

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The purpose of this Draft Environmental Impact Report (DEIR) is to evaluate the potential environmental effects of the proposed Riverside Free Methodist Church Demolition Project (proposed project). The City of Riverside (City) circulated a Notice of Preparation (NOP) beginning on December 2, 2014, with the public review period ending on January 2, 2015. The NOP was transmitted to the State Clearinghouse, responsible agencies, other affected agencies, and sent to property owners adjacent to the project site to solicit issues and concerns related to the proposed project. The NOP, Initial Study, and comment letters are contained in Appendix A of this DEIR.

The reason for the proposed demolition and grading project is to prepare the site for its future use as governed by the CBUSP. As discussed previously, impacts associated with the demolition of existing buildings were not addressed in the CBUSP MND because CBU did not own the property at the time.

The JMRC report prepared for the CBUSP found RFMC eligible for Structure of Merit status and, based on this, Title 20 defines the property as a Cultural Resource, which is a historic resource under CEQA.<sup>1</sup> The demolition of the RFMC is being analyzed at the EIR level due to the potentially significant historical status of the RFMC. In addition, several other topics (Air Quality, Biological Resources, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Noise, and Transportation and Traffic) were not fully analyzed in the proposed project's Initial Study (IS) as the technical studies on which the IS relies on were not complete. These topics are fully analyzed in this DEIR.

Sections 4.1–4.7 of the DEIR contain the potential environmental impacts analysis associated with implementation of the proposed project and focus on the following issues:

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<sup>1</sup> JM Research and Consulting, *Cultural Resources Survey, California Baptist University Specific Plan*, 2012 (excerpted in Wilkman Historical Services Report).

- Air Quality
- Biological Resources
- Cultural Resources
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Noise
- Transportation and Traffic

### **Technical Studies**

Technical studies in the areas of air quality/greenhouse gas emissions, biological resources, cultural resources, hazards and hazardous materials, noise, and traffic were used in this DEIR. These documents are identified in the discussion for the individual environmental issue and included as technical appendices on a CD attached to the DEIR. Hard copies are available at the Planning Division of the Community Development Department of the City of Riverside.

### **Analysis Format**

The DEIR assesses how the proposed project would affect these issue areas. Each environmental issue addressed in this DEIR is presented in terms of the following subsections:

- **Existing Setting:** Provides information describing the existing setting on or surrounding the project site that may be subject to change as a result of the implementation of the project. This setting described the conditions that existed when the NOP was sent to responsible agencies and the State Clearinghouse.
- **Threshold of Significance:** Provides criteria for determining the significance of project impacts for each environmental issue.
- **Environmental Impacts before Mitigation:** Provides a discussion of the characteristics of the proposed project that may have an effect on the environment, analyzes the nature and extent to which the proposed project is expected to change the existing environment, and indicates whether the project impacts meet or exceed the levels of significance thresholds. As stated previously, this EIR will be analyzing the proposed project on both a project-level as well as on a programmatic-level. This section of each EIR section will differentiate between these two levels of analysis.
- **Mitigation Measures:** Identifies mitigation measures to reduce significant adverse impacts to the extent feasible.
- **Environmental Impacts after Mitigation Is Incorporated:** Provides a discussion of significant adverse environmental impacts that cannot be feasibly mitigated or avoided, significant adverse environmental impacts that can be feasibly mitigated or avoided, adverse environmental impacts that are not significant, and beneficial impacts.

## 4.1 Air Quality

The focus of the following discussion and analysis, based on the Initial Study (IS) (Appendix A) and Notice of Preparation public comment period, focuses on the potentially adverse impacts to air quality during the proposed Riverside Free Methodist Church Demolition Project (proposed project). The IS determined that air quality impacts related to objectionable odors were less than significant and are therefore not discussed further in this DEIR.

In addition to other documents, the following sources were used in the preparation of this section of the Draft Environmental Impact Report (DEIR):

- *Air Quality and Greenhouse Gas Emissions Analysis*, LSA Associates, Inc., December 2014 (Appendix B).

### 4.1.1 Setting

#### Existing Conditions

##### *Climate and Topography*

The project site is located within the South Coast Air Basin (Basin), which includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties. Air quality in the project area is affected not only by various emission sources (e.g., mobile, industry), but also by atmospheric conditions, such as wind speed, wind direction, temperature, and rainfall. The Basin's combination of topography, low mean mixing height, abundant sunshine, and emissions from one of the largest urban areas in the United States has historically resulted in some of the worst air pollution in the nation.

Although the Basin has a semiarid climate, air near the surface is generally moist because of the presence of a shallow marine layer. With very low average wind speeds, there is a limited capacity to disperse air contaminants horizontally. The dominant daily wind pattern is an onshore daytime breeze of 8–12 miles per hour (mph) and an offshore nighttime breeze of 3–5 mph. The typical wind flow pattern fluctuates only with occasional winter storms or strong northeasterly Santa Ana winds from the mountains and deserts northeast of the Basin. Summer wind flow patterns represent worst-case conditions because this is the period of higher temperatures and more sunlight, which results in more ozone (O<sub>3</sub>) formation.

The City of Riverside's (City's) climate is characterized by relatively low rainfall, with warm summers and mild winters. Average temperatures range from a high of 95 degrees Fahrenheit (°F) in August to a low of 40°F in December. Annual precipitation averages about 0.5 to 2.5 inches, falling mostly from December through March (City-Data.com 2012).

During spring and early summer, pollution produced during any one day is typically blown out of the Basin through mountain passes or lifted by warm, vertical currents adjacent to mountain slopes. The vertical dispersion of air pollutants in the Basin is limited by temperature inversions in the atmosphere close to the Earth's surface. The combination of stagnant wind conditions and low inversions produces the greatest pollutant concentrations. On days of no inversion or high wind speeds, ambient air pollutant concentrations are lowest. During periods of low inversions and low wind speeds, air pollutants generated in urbanized areas are transported predominantly onshore into Riverside and San Bernardino Counties. In the winter, the greatest pollution problems are carbon monoxide (CO), particulate matter (PM<sub>2.5</sub> and PM<sub>10</sub>), and nitrogen dioxide (NO<sub>2</sub>) because of extremely low inversions and air stagnation during the night and early morning hours. In the summer, the longer daylight hours and the brighter sunshine combine to cause a reaction between hydrocarbons and oxides of nitrogen (NO<sub>x</sub>) to form photochemical smog.

### **Sensitive Receptors**

Air quality varies as a direct function of the amount of pollutants emitted into the atmosphere, the size and topography of the air basin, and the prevailing meteorological conditions. Air quality problems arise when the rate of pollutant emissions exceeds the rate of dispersion. Reduced visibility, eye irritation, and adverse health impacts upon those persons termed “sensitive receptors” are the most serious hazards of existing air quality conditions in the area. Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. People most likely to be affected by air pollution, as identified by the California Air Resources Board (CARB), may include children, the elderly, and people with cardiovascular and chronic respiratory diseases. Sensitive receptors may include residences, schools, playgrounds, childcare centers, long-term healthcare facilities, rehabilitation centers, convalescent centers, and retirement homes. Existing on-campus apartments located approximately 85 feet from the project site are the nearest sensitive receptors.

### **Pollutants and Effects**

Criteria air pollutants are defined as pollutants for which the Federal and State governments have established ambient air quality standards, or criteria, for outdoor concentrations to protect public health. The Federal and State standards have been set, with an adequate margin of safety, at levels above which concentrations could be harmful to human health and welfare. These standards are designed to protect the most sensitive persons from illness or discomfort. Pollutants of concern include O<sub>3</sub>, NO<sub>2</sub>, CO, sulfur dioxide (SO<sub>2</sub>), particulate matter with an aerodynamic diameter less than or equal to 10 microns in size (PM<sub>10</sub>), particulate matter with an aerodynamic diameter less than or equal to 2.5 microns in size (PM<sub>2.5</sub>), and lead (Pb). These pollutants, as well

as toxic air contaminants (TAC), are discussed below.<sup>1</sup> In California, sulfates (SO<sub>4</sub>), vinyl chloride, hydrogen sulfide, and visibility-reducing particles are also regulated as criteria air pollutants.

**Ozone.** O<sub>3</sub> is a strong-smelling, pale blue, reactive, toxic chemical gas consisting of three oxygen atoms. It is a secondary pollutant formed in the atmosphere by a photochemical process involving the sun's energy and O<sub>3</sub> precursors, such as hydrocarbons and NO<sub>x</sub>. These precursors are mainly NO<sub>x</sub> and volatile organic compounds (VOCs; also referred to as reactive organic compounds or gases [ROCs or ROGs]). The maximum effects of precursor emissions on O<sub>3</sub> concentrations usually occur several hours after they are emitted and many miles from the source. Meteorology and terrain play major roles in O<sub>3</sub> formation, and ideal conditions occur during summer and early autumn, on days with low wind speeds or stagnant air, warm temperatures, and cloudless skies. O<sub>3</sub> exists in the upper atmosphere ozone layer (stratospheric ozone) as well as at the Earth's surface in the troposphere (ozone). O<sub>3</sub> in the troposphere causes numerous adverse health effects; short-term exposures (lasting for a few hours) to O<sub>3</sub> at levels typically observed in Southern California can result in breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue, and some immunological changes. These health problems are particularly acute in sensitive receptors such as the sick, the elderly, and young children.

**Nitrogen Dioxide.** NO<sub>2</sub> is a brownish, highly reactive gas that is present in all urban atmospheres. The major mechanism for the formation of NO<sub>2</sub> in the atmosphere is the oxidation of the primary air pollutant nitric oxide (NO), which is a colorless, odorless gas. NO<sub>x</sub> plays a major role, together with VOCs, in the atmospheric reactions that produce O<sub>3</sub>. NO<sub>x</sub> is formed from fuel combustion under high temperature or pressure. In addition, NO<sub>x</sub> is an important precursor to acid rain and may affect both terrestrial and aquatic ecosystems. The two major emissions sources are transportation and stationary fuel combustion sources such as electric utility and industrial boilers. NO<sub>2</sub> can irritate the lungs, cause bronchitis and pneumonia, and lower resistance to respiratory infections.

**Carbon Monoxide.** CO is a colorless, odorless gas formed by the incomplete combustion of hydrocarbon, or fossil, fuels. CO is emitted almost exclusively from motor vehicles, power plants, refineries, industrial boilers, ships, aircraft, and trains. In urban areas such as the project location, automobile exhaust accounts for the majority of CO emissions. CO is a non-reactive air pollutant that dissipates relatively quickly; therefore, ambient CO concentrations generally follow the spatial and temporal distributions of vehicular traffic. CO concentrations are influenced by local meteorological conditions; primarily, wind speed, topography, and atmospheric stability. CO from motor vehicle exhaust can become locally concentrated when

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<sup>1</sup> The descriptions of health effects for each of the criteria air pollutants associated with project construction and operations are based on the U.S. Environmental Protection Agency's *Six Common Air Pollutants* (EPA 2013a) and CARB's *Glossary of Air Pollutant Terms* (CARB 2012).

surface-based temperature inversions are combined with calm atmospheric conditions, a typical situation at dusk in urban areas from November to February. The highest levels of CO typically occur during the colder months of the year, when inversion conditions are more frequent. In terms of adverse health effects, CO competes with oxygen, often replacing it in the blood, thus reducing the blood's ability to transport oxygen to vital organs. The results of excess CO exposure can include dizziness, fatigue, and impairment of central nervous system functions.

**Sulfur Dioxide.** SO<sub>2</sub> is a colorless, pungent gas formed primarily from incomplete combustion of sulfur-containing fossil fuels. The main sources of SO<sub>2</sub> are coal and oil used in power plants and industries; as such, the highest levels of SO<sub>2</sub> are generally found near large industrial complexes. In recent years, SO<sub>2</sub> concentrations have been reduced by the increasingly stringent controls placed on stationary source emissions of SO<sub>2</sub> and limits on the sulfur content of fuels. SO<sub>2</sub> is an irritant gas that attacks the throat and lungs and can cause acute respiratory symptoms and diminished ventilator function in children. When combined with particulate matter, SO<sub>2</sub> can injure lung tissue and reduce visibility and the level of sunlight. SO<sub>2</sub> can also yellow plant leaves and erode iron and steel.

**Particulate Matter.** Particulate matter pollution consists of very small liquid and solid particles floating in the air, which can include smoke, soot, dust, salts, acids, and metals. Particulate matter can form when gases emitted from industries and motor vehicles undergo chemical reactions in the atmosphere. PM<sub>2.5</sub> and PM<sub>10</sub> represent fractions of particulate matter. Fine particulate matter (PM<sub>2.5</sub>) is roughly  $\frac{1}{28}$  the diameter of a human hair. PM<sub>2.5</sub> results from fuel combustion (e.g., from motor vehicles and power generation and industrial facilities), residential fireplaces, and woodstoves. In addition, PM<sub>2.5</sub> can be formed in the atmosphere from gases such as sulfur oxides (SO<sub>x</sub>), NO<sub>x</sub>, and VOCs. Respirable particulate matter, or coarse particulate matter (PM<sub>10</sub>), is about  $\frac{1}{7}$  the thickness of a human hair. Major sources of PM<sub>10</sub> include crushing or grinding operations; dust stirred up by vehicles traveling on roads; wood-burning stoves and fireplaces; dust from construction, landfills, and agriculture; wildfires and brush/waste burning; industrial sources; windblown dust from open lands; and atmospheric chemical and photochemical reactions.

PM<sub>2.5</sub> and PM<sub>10</sub> pose a greater health risk than larger particles. When inhaled, these tiny particles can penetrate the human respiratory system's natural defenses and damage the respiratory tract. PM<sub>2.5</sub> and PM<sub>10</sub> can increase the number and severity of asthma attacks, cause or aggravate bronchitis and other lung diseases, and reduce the body's ability to fight infections. Very small particles of substances such as lead, sulfates, and nitrates can cause lung damage directly or be absorbed into the blood stream, causing damage elsewhere in the body. Additionally, these substances can transport absorbed gases such as chlorides or ammonium into the lungs, also causing injury. Whereas PM<sub>10</sub> tends to collect in the upper portion of the respiratory system, PM<sub>2.5</sub> is so tiny that it can penetrate deeper into the lungs and damage lung tissue. Suspended

particulates also damage and discolor surfaces on which they settle, as well as producing haze and reducing regional visibility.

People with influenza, people with chronic respiratory and cardiovascular diseases, and the elderly may suffer worsening illness and premature death as a result of breathing particulate matter. People with bronchitis can expect aggravated symptoms from breathing in particulate matter. Children may experience a decline in lung function due to breathing in PM<sub>10</sub> and PM<sub>2.5</sub>. Other groups considered sensitive are smokers, people who cannot breathe well through their noses, and exercising athletes (because many breathe through their mouths).

**Lead.** Lead in the atmosphere occurs as particulate matter. Sources of lead include leaded gasoline; the manufacturing of batteries, paints, ink, ceramics, and ammunition; and secondary lead smelters. Prior to 1978, mobile emissions were the primary source of atmospheric lead. Between 1978 and 1987, the phase-out of leaded gasoline reduced the overall inventory of airborne lead by nearly 95 percent. With the phase-out of leaded gasoline, secondary lead smelters, battery recycling, and manufacturing facilities are becoming lead-emission sources of greater concern.

Prolonged exposure to atmospheric lead poses a serious threat to human health. Health effects associated with exposure to lead include gastrointestinal disturbances, anemia, kidney disease, and in severe cases, neuromuscular and neurological dysfunction. Of particular concern are low-level lead exposures during infancy and childhood. Such exposures are associated with decrements in neurobehavioral performance, including intelligence quotient performance, psychomotor performance, reaction time, and growth. Children are highly susceptible to the effects of lead.

**Volatile Organic Compounds.** Hydrocarbons are organic gases that are formed from hydrogen and carbon and sometimes other elements. Hydrocarbons that contribute to formation of O<sub>3</sub> are referred to and regulated as VOCs (also referred to as ROGs). Combustion engine exhaust, oil refineries, and fossil-fueled power plants are the sources of hydrocarbons. Other sources of hydrocarbons include evaporation from petroleum fuels, solvents, dry cleaning solutions, and paint.

The primary health effects of VOCs result from the formation of O<sub>3</sub> and its related health effects. High levels of VOCs in the atmosphere can interfere with oxygen intake by reducing the amount of available oxygen through displacement. Carcinogenic forms of hydrocarbons, such as benzene, are considered TACs. There are no separate health standards for VOCs as a group.

**Toxic Air Contaminants.** A substance is considered toxic if it has the potential to cause adverse health effects in humans, including increasing the risk of cancer upon exposure, or acute and/or chronic non-cancer health effects. A toxic substance released into the air is considered a TAC.

TACs are identified by Federal and State agencies based on a review of available scientific evidence. In the State of California, TACs are identified through a two-step process that was established in 1983 under the Toxic Air Contaminant Identification and Control Act. This two-step process of risk identification and risk management and reduction was designed to protect residents from the health effects of toxic substances in the air. In addition, the California Air Toxics “Hot Spots” Information and Assessment Act, Assembly Bill 2588, was enacted by the legislature in 1987 to address public concern over the release of TACs into the atmosphere. The law requires facilities emitting toxic substances to provide local air pollution control districts with information that will allow an assessment of the air toxics problem, identification of air toxics emission sources, location of resulting hotspots, notification of the public exposed to significant risk, and development of effective strategies to reduce potential risks to the public over five years.

Examples include certain aromatic and chlorinated hydrocarbons, certain metals, and asbestos. TACs are generated by a number of sources, including stationary sources, such as dry cleaners, gas stations, combustion sources, and laboratories; mobile sources, such as automobiles; and area sources, such as landfills. Adverse health effects associated with exposure to TACs may include carcinogenic (i.e., cancer-causing) and noncarcinogenic effects. Noncarcinogenic effects typically affect one or more target organ systems and may be experienced on either short-term (acute) or long-term (chronic) exposure to a given TAC.

**Diesel Particulate Matter.** Diesel particulate matter is part of a complex mixture that makes up diesel exhaust. Diesel exhaust is composed of two phases, gas and particle, both of which contribute to health risks. CARB classified “particulate emissions from diesel-fueled engines” (i.e., diesel particulate matter) as a TAC in August 1998. Diesel particulate matter is emitted from a broad range of diesel engines: on-road diesel engines of trucks, buses, and cars and off-road diesel engines including locomotives, marine vessels, and heavy-duty construction equipment, among others. Approximately 70 percent of all airborne cancer risk in California is associated with diesel particulate matter (CARB 2000). To reduce the cancer risk associated with diesel particulate matter, CARB adopted a diesel risk reduction plan in 2000 (CARB 2000).

### **Related Regulations**

#### ***Federal***

The Federal Clean Air Act, passed in 1970 and last amended in 1990, forms the basis for the national air pollution control effort. The U.S. Environmental Protection Agency (EPA) is responsible for implementing most aspects of the Clean Air Act, including setting National Ambient Air Quality Standards (NAAQS) for major air pollutants, setting hazardous air pollutant standards, approving state attainment plans, setting motor vehicle emission standards, issuing stationary source emission standards and permits, and establishing acid rain control measures,

stratospheric O<sub>3</sub> protection measures, and enforcement provisions. NAAQS are established for criteria pollutants under the Clean Air Act, which are O<sub>3</sub>, CO, NO<sub>2</sub>, SO<sub>2</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>, and lead.

The NAAQS describe acceptable air quality conditions designed to protect the health and welfare of the citizens of the nation. The NAAQS (other than for O<sub>3</sub>, NO<sub>2</sub>, SO<sub>2</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>, and those based on annual averages or arithmetic mean) are not to be exceeded more than once per year. NAAQS for O<sub>3</sub>, NO<sub>2</sub>, SO<sub>2</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> are based on statistical calculations over one to three-year periods, depending on the pollutant. The Clean Air Act requires the EPA to reassess the NAAQS at least every five years to determine whether adopted standards are adequate to protect public health based on current scientific evidence. States with areas that exceed the NAAQS must prepare a State Implementation Plan that demonstrates how those areas will attain the standards within mandated time frames.

### *State*

The Federal Clean Air Act delegates the regulation of air pollution control and the enforcement of the NAAQS to the states. In California, the task of air quality management and regulation has been legislatively granted to CARB, with subsidiary responsibilities assigned to air quality management districts and air pollution control districts at the regional and county levels. CARB, which became part of the California Environmental Protection Agency in 1991, is responsible for ensuring implementation of the California Clean Air Act of 1988, responding to the Federal Clean Air Act, and regulating emissions from motor vehicles and consumer products.

CARB has established California Ambient Air Quality Standards (CAAQS), which are generally more restrictive than the NAAQS. The CAAQS describe adverse conditions; that is, pollution levels must be below these standards before a basin can attain the standard. Air quality is considered “in attainment” if pollutant levels are continuously below the CAAQS and violate the standards no more than once each year. The CAAQS for O<sub>3</sub>, CO, SO<sub>2</sub> (1-hour and 24-hour), NO<sub>2</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>, and visibility-reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded. The NAAQS and CAAQS are presented in Table 4.1-1, Ambient Air Quality Standards.

**Table 4.1-1**  
**Ambient Air Quality Standards**

Pollutant	Average Time	California Standards <sup>a</sup>	National Standards <sup>b</sup>	
		Concentration <sup>c</sup>	Primary <sup>c,d</sup>	Secondary <sup>c,e</sup>
O <sub>3</sub>	1 hour	0.09 ppm (180 µg/m <sup>3</sup> )	—	Same as primary standard
	8 hours	0.070 ppm (137 µg/m <sup>3</sup> )	0.075 ppm (147 µg/m <sup>3</sup> )	
CO	8 hours	9.0 ppm (10 mg/m <sup>3</sup> )	9 ppm (10 mg/m <sup>3</sup> )	None
	1 hour	20 ppm (23 mg/m <sup>3</sup> )	35 ppm (40 mg/m <sup>3</sup> )	

**Table 4.1-1**  
**Ambient Air Quality Standards**

Pollutant	Average Time	California Standards <sup>a</sup>	National Standards <sup>b</sup>	
		Concentration <sup>c</sup>	Primary <sup>c,d</sup>	Secondary <sup>c,e</sup>
NO <sub>2</sub>	Annual arithmetic mean	0.030 ppm (57 µg/m <sup>3</sup> )	0.053 ppm (100 µg/m <sup>3</sup> )	Same as primary standard
	1 hour	0.18 ppm (339 µg/m <sup>3</sup> )	0.100 ppm (188 µg/m <sup>3</sup> )	
SO <sub>2</sub>	1 hour	0.25 ppm (655 µg/m <sup>3</sup> )	0.075 ppm (196 µg/m <sup>3</sup> )	—
	3 hours	—	—	0.5 ppm (1300 µg/m <sup>3</sup> )
	24 hours	0.04 ppm (105 µg/m <sup>3</sup> )	0.14 ppm (for certain areas) <sup>7</sup>	—
	Annual	—	0.030 ppm (for certain areas) <sup>7</sup>	—
PM <sub>10</sub>	24 hours	50 µg/m <sup>3</sup>	150 µg/m <sup>3</sup>	Same as primary standard
	Annual arithmetic mean	20 µg/m <sup>3</sup>	—	
PM <sub>2.5</sub>	24 hours	No separate State standard	35 µg/m <sup>3</sup>	Same as primary standard
	Annual arithmetic mean	12 µg/m <sup>3</sup>	12.0 µg/m <sup>3</sup>	15.0 µg/m <sup>3</sup>
Lead <sup>f</sup>	30-day average	1.5 µg/m <sup>3</sup>	—	—
	Calendar quarter	—	1.5 µg/m <sup>3</sup> (for certain areas) <sup>9</sup>	Same as primary standard
	Rolling 3-month average	—	0.15 µg/m <sup>3</sup>	
Hydrogen sulfide	1 hour	0.03 ppm (42 µg/m <sup>3</sup> )	—	—
Vinyl chloride <sup>f</sup>	24 hours	0.01 ppm (26 µg/m <sup>3</sup> )	—	—
Sulfates (SO <sub>4</sub> )	24 hours	25 µg/m <sup>3</sup>	—	—
Visibility-reducing particles	8 hours (10:00 a.m. to 6:00 p.m. PST)	Insufficient amount to produce an extinction coefficient of 0.23 per kilometer due to particles when the relative humidity is less than 70%	—	—

Source: CARB 2013a.

ppm = parts per million by volume; µg/m<sup>3</sup> = micrograms per cubic meter; mg/m<sup>3</sup> = milligrams per cubic meter

<sup>a</sup> California standards for O<sub>3</sub>, CO, SO<sub>2</sub> (1-hour and 24-hour), NO<sub>2</sub>, suspended particulate matter—PM<sub>10</sub>, PM<sub>2.5</sub>, and visibility reducing particles, are values that are not to be exceeded. All others are not to be equaled or exceeded. CAAQS are listed in the Table of Standards in 17 CCR 70200.

<sup>b</sup> National standards (other than O<sub>3</sub>, NO<sub>2</sub>, SO<sub>2</sub>, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The O<sub>3</sub> standard is attained when the fourth-highest 8-hour concentration measured at each site in a year, averaged over 3 years, is equal to or less than the standard. For PM<sub>10</sub>, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m<sup>3</sup> is equal to or less than one. For PM<sub>2.5</sub>, the 24-hour standard is attained when 98% of the daily concentrations, averaged over 3 years, are equal to or less than the standard.

<sup>c</sup> Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25 degrees Celsius (°C) and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

<sup>d</sup> National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

<sup>e</sup> National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

<sup>f</sup> CARB has identified lead and vinyl chloride as TACs with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

<sup>9</sup> In 2010, a new 1-hour SO<sub>2</sub> standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO<sub>2</sub> national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment of the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

As part of its diesel risk reduction program, CARB adopted an Airborne Toxic Control Measure (ATCM) that applies to new and in-use stationary compression-ignition (i.e., diesel) engines. The ATCM was adopted in 2004 and revised in November 2010 with an effective date of May 19, 2011. After December 31, 2008, the ATCM requires that new emergency standby engines must comply with EPA emission standards applicable to a 2007-model-year off-road engine of the same horsepower rating. The ATCM further limits the particulate matter emissions from an emergency standby engine operated less than 50 hours per year for maintenance and testing to 0.15 gram per brake-horsepower-hour.

### ***Local***

While CARB is responsible for the regulation of mobile emission sources within the state, local air quality management districts and air pollution control districts are responsible for enforcing standards and regulating stationary sources. The South Coast Air Quality Management District (SCAQMD) is the regional agency responsible for the regulation and enforcement of Federal, State, and local air pollution control regulations in the Basin, where the project is located. The SCAQMD operates monitoring stations in the Basin, develops rules and regulations for stationary sources and equipment, prepares emissions inventory and air quality management planning documents, and conducts source testing and inspections. The SCAQMD's Air Quality Management Plans (AQMPs) include control measures and strategies to be implemented to attain the CAAQS and NAAQS in the Basin. The SCAQMD then implements these control measures as regulations to control or reduce criteria pollutant emissions from stationary sources or equipment.

The SCAQMD's governing board adopted the 2003 AQMP on August 1, 2003. The 2003 AQMP updates the attainment demonstration for the Federal standards for O<sub>3</sub> and PM<sub>10</sub>, replaces the 1997 attainment demonstration for the Federal CO standard, provides a basis for a maintenance plan for CO for the future, and updates the maintenance plan for the Federal NO<sub>2</sub> standard that the Basin has met since 1992 (SCAQMD 2003). On March 10, 2009, the EPA issued a final rule partially approving and partially disapproving the 2003 AQMP. On February 2, 2011, the U.S. Court of Appeals for the Ninth Circuit ruled that EPA's partial approval was arbitrary and capricious. The court further ruled that the EPA should have ordered California to submit a revised attainment plan for the Basin after it disapproved the 2003 AQMP and that the EPA should have required transportation control measures.

The SCAQMD's governing board adopted the 2007 AQMP on June 1, 2007. The 2007 AQMP includes the same updates as the 2003 AQMP and incorporates significant new scientific data, primarily in the form of updated emissions inventories, ambient measurements, new meteorological episodes, and new air quality modeling tools (SCAQMD 2007). As part of the 2007 AQMP, the SCAQMD requested that the EPA "bump up" the O<sub>3</sub> nonattainment status from severe to extreme to allow additional time for the Basin to achieve attainment with the Federal

standard. The additional time would provide for implementation of State and Federal measures that apply to sources over which the SCAQMD does not have control. The 2007 AQMP has been approved by CARB; however, on November 22, 2010, the EPA issued a proposed rule to approve in part and disapprove in part the portions related to attainment of the Federal PM<sub>2.5</sub> standard. The EPA, however, approved the redesignation of the Basin to an extreme O<sub>3</sub> nonattainment area, effective June 4, 2010.

On December 7, 2012, the SCAQMD's governing board adopted the Final 2012 AQMP (SCAQMD 2013), which is designed to meet applicable Federal and State requirements for O<sub>3</sub> and particulate matter. The Final 2012 AQMP demonstrates attainment of the Federal 24-hour PM<sub>2.5</sub> standard by 2014 in the Basin through adoption of all feasible measures. The 2012 AQMP also updates the EPA-approved 8-hour O<sub>3</sub> control plan with new measures designed to reduce reliance on the Clean Air Act Section 182(e)(5) long-term measures for NO<sub>x</sub> and VOC reductions. Based on General Plans for cities and counties in the Basin, demographic growth forecasts for various socioeconomic categories (i.e., population, housing, employment by industry) developed by the Southern California Association of Governments (SCAG) for its 2012 Regional Transportation Plan were used in the 2012 AQMP. In addition, emission reductions resulting from SCAQMD regulations adopted by June 2012 and CARB regulations adopted by August 2011 are included in the baseline. The 2012 AQMP reduction and control measures, which are outlined to mitigate emissions, are based on existing and projected land use and development. The Final 2012 AQMP was approved by CARB on January 25, 2013, and is being reviewed by the EPA.

Emissions that would result from mobile, stationary, and area sources during construction and operation of a project are subject to the rules and regulations of the SCAQMD. The SCAQMD rules applicable to the construction and operation of the project may include the following rules (SCAQMD 2011; the permitting, boiler, and engines rules would be applicable because the project would include devices subject to these rules).

**Rule 201 – Permit to Construct:** This rule establishes an orderly procedure for the review of new and modified sources of air pollution through the issuance of permits. Rule 201 specifies that any facility installing nonexempt equipment that causes or controls the emissions of air pollutants must first obtain a permit to construct from the SCAQMD.

**Rule 401 – Visible Emissions:** This rule establishes the limit for visible emissions from stationary sources. This rule prohibits visible emissions dark or darker than Ringlemann No. 1 for periods greater than three minutes in any hour.<sup>1</sup>

**Rule 402 – Nuisance:** This rule prohibits the discharge of air pollutants from a facility that cause injury, detriment, nuisance, or annoyance to the public or damage to business or property.

**Rule 403 – Fugitive Dust:** This rule requires fugitive dust sources to implement best available control measures for all sources and prohibits all forms of visible particulate matter from crossing any property line. SCAQMD Rule 403 is intended to reduce PM<sub>10</sub> emissions from any transportation, handling, construction, or storage activity that has the potential to generate fugitive dust.

**Rule 431.2 – Sulfur Content of Liquid Fuels:** The purpose of this rule is to limit the sulfur content in diesel and other liquid fuels for the purpose both of reducing the formation of SO<sub>x</sub> and particulates during combustion and of enabling the use of add-on control devices for diesel-fueled internal combustion engines. The rule applies to all refiners, importers, and other fuel suppliers such as distributors, marketers, and retailers, as well as to users of diesel, low-sulfur diesel, and other liquid fuels for stationary-source applications in the SCAQMD. The rule also affects diesel fuel supplied for mobile source applications.

**Rule 1110.2 – Emissions from Gaseous- and Liquid-Fueled Engines:** This rule applies to stationary and portable engines rated at greater than 50 horsepower. The purpose of Rule 1110.2 is to reduce NO<sub>x</sub>, VOCs, and CO emissions from engines. Emergency engines, including those powering standby generators, are generally exempt from the emissions and monitoring requirements of this rule as they have permit conditions that limit operation to 200 hours or less per year as determined by an elapsed operating time meter.

**Rule 1113 – Architectural Coatings:** This rule requires manufacturers, distributors, and end users of architectural and industrial maintenance coatings to reduce VOC emissions from the use of these coatings, primarily by placing limits on the VOC content of various coating categories.

**Regulation XIV – Toxics and Other Non-Criteria Pollutants:** This regulation includes rules that regulate toxics and other non-criteria pollutants. It provides specifications for maximum individual cancer risk, cancer burden, and noncancer acute and chronic hazard index from new permit units, relocations, or modifications to existing permit units that emit TACs. The rules establish allowable risks for permit units requiring new permits pursuant to Rules 201 or 203. Under this regulation, Rule 1401 (New Source Review of Toxic Air

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<sup>1</sup> The Ringlemann Chart is used to describe opacity. A Ringlemann No. 1 rating has opacity of 20 percent and a transmittance of 80 percent. Source: EPA Visible Emissions Field Manual, 1993. Accessed online (February 9, 2015): <http://www.epa.gov/ttn/emc/methods/VEFieldManual.pdf>.

Contaminants) specifies limits for maximum individual cancer risk, cancer burden, and non-cancer acute and chronic hazard indices from new permit units, relocations, or modifications to existing permit units that emit TACs listed in the rule. In addition, Rule 1401.1 (Requirements for New and Relocated Facilities near Schools) may impose other criteria on sources of TACs due to the proximity of schools to the project site.

### **South Coast Air Basin Attainment Designation**

An area is designated “in attainment” when it is in compliance with the NAAQS and/or CAAQS. These standards are set by the EPA or CARB for the maximum level of a given air pollutant that can exist in the outdoor air without unacceptable effects on human health or the public welfare with a margin of safety.

The criteria pollutants of primary concern considered in this air quality assessment include O<sub>3</sub>, NO<sub>2</sub>, CO, SO<sub>2</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>, and lead. Although there are no ambient standards for VOCs or NO<sub>x</sub>, they are important because they are precursors to O<sub>3</sub>.

The entire Basin is designated as a nonattainment area for both Federal and State O<sub>3</sub> standards. The EPA has classified the Basin as an “extreme nonattainment” area and has mandated that it achieve attainment no later than June 15, 2024. The Federal NO<sub>2</sub> standard was revised in 2010, and all areas of California have been designated unclassifiable/nonattainment. The Basin is designated as a nonattainment area for the State NO<sub>2</sub> standards. The Basin is designated as an attainment area for Federal and State CO and SO<sub>2</sub> standards, as an attainment area for the Federal PM<sub>10</sub> standard and as a nonattainment area for the State PM<sub>10</sub> standards. The Basin is designated as a nonattainment area for both Federal and State PM<sub>2.5</sub> standards. Riverside County is designated unclassifiable/attainment for State and Federal lead standards.

The attainment classifications for these criteria pollutants are outlined in Table 4.1-2, Basin Attainment Classification.

**Table 4.1-2  
Basin Attainment Classification**

Pollutant	Averaging Time	State Designation/Classification <sup>a</sup>	National Designation/Classification <sup>b</sup>
O <sub>3</sub>	1 hour	Nonattainment	—
	8 hours	Nonattainment	Nonattainment (extreme)
NO <sub>2</sub>	1 hour Annual arithmetic mean	Nonattainment	Unclassifiable/attainment
CO	1 hour	Attainment	Attainment (maintenance)
	8 hours		

**Table 4.1-2  
Basin Attainment Classification**

Pollutant	Averaging Time	State Designation/Classification <sup>a</sup>	National Designation/Classification <sup>b</sup>
SO <sub>2</sub>	1 hour 24 hours Annual arithmetic mean	Attainment	Unclassifiable
PM <sub>10</sub>	24 hours Annual arithmetic mean	Nonattainment	Attainment (maintenance)
PM <sub>2.5</sub>	24 hours Annual arithmetic mean	Nonattainment	Nonattainment
Lead (Pb)	Quarter	—	Unclassifiable/attainment
	3-month average	—	Unclassifiable/attainment
	30-day average	Attainment	—
Sulfates (SO <sub>4</sub> )	24 hour	Attainment	—
Hydrogen sulfide (H <sub>2</sub> S)	1 hour	Unclassified	—
Vinyl chloride <sup>a</sup>	24 hours	Unclassified	—
Visibility-reducing particles	8 hour (10:00 a.m.–6:00 p.m.)	Unclassified	—

Sources: CARB 2013b (state designation/classification); EPA 2013b (national designation/classification).

<sup>a</sup> CARB has identified lead and vinyl chloride as TACs with no threshold level of exposure for adverse health effects determined.

### Air Quality Monitoring Data

The project area's local ambient air quality is monitored by SCAQMD and CARB. CARB monitors ambient air quality at approximately 250 air quality monitoring stations across the state. Air quality monitoring stations usually measure pollutant concentrations 10 feet above ground level; therefore, air quality is often referred to in terms of ground-level concentrations. The Riverside-Magnolia Station is the nearest air quality monitoring station to the project site. The data collected at this station are considered representative of the air quality experienced in the project vicinity. Air quality data from 2011 through 2013 for the Riverside-Magnolia station are provided in Table 4.1-3, Ambient Air Quality Data. The pollutants monitored are CO, O<sub>3</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>, NO<sub>2</sub>, and SO<sub>2</sub>. The number of days exceeding the ambient air quality standards is shown in Table 4.1-4, Frequency of Air Quality Standard Violations.

**Table 4.1-3**  
**Ambient Air Quality Data**  
**(parts per million unless otherwise indicated)**

Pollutant	Measurement	2011	2012	2013	Most Stringent Ambient Air Quality Standard	Monitoring Station
O <sub>3</sub>	1 hour max.	0.128	0.126	0.123	0.09	Riverside-Rubidoux
	8 hour max.	0.115	0.102	0.103	0.070	
NO <sub>2</sub>	1 hour max.	0.063	0.062	0.060	0.100	Riverside-Magnolia
	Annual av.	ND	ND	ND	0.030	
CO	1 hour max.	4.4	2.0	2.0	20	Riverside-Magnolia
	8 hour max.	1.35	1.59	ND	9.0	
SO <sub>2</sub>	24 hour max.	0.001	0.001	0.001	0.04	Riverside-Magnolia
	Annual av.	ND	ND	ND	0.030	
PM <sub>10</sub>	24 hour max.	82.7 µg/m <sup>3</sup>	67.0 µg/m <sup>3</sup>	135.0 µg/m <sup>3</sup>	50 µg/m <sup>3</sup>	Riverside-Magnolia
	Annual av.	32.5 µg/m <sup>3</sup>	33.4 µg/m <sup>3</sup>	34.6 µg/m <sup>3</sup>	20 µg/m <sup>3</sup>	
PM <sub>2.5</sub>	24 hour max.	60.8 µg/m <sup>3</sup>	38.1 µg/m <sup>3</sup>	60.3 µg/m <sup>3</sup>	35 µg/m <sup>3</sup>	Riverside-Magnolia
	Annual av.	13.5 µg/m <sup>3</sup>	13.6 µg/m <sup>3</sup>	14.8 µg/m <sup>3</sup>	12 µg/m <sup>3</sup>	

Sources: CARB 2013c; EPA 2013c (for 1-hour CO).

Note: Data taken from CARB iADAM (2012) or EPA AirData (2012) represent the highest concentrations experienced over a given year.

N/A = insufficient data available to determine the value; µg/m<sup>3</sup> = micrograms per cubic meter; max. = maximum; ave. = average

**Table 4.1-4**  
**Frequency of Air Quality Standard Violations**

Year	Number of Days Exceeding Standard					
	State 1-Hour O <sub>3</sub>	State 8-Hour O <sub>3</sub>	National 8-Hour O <sub>3</sub>	State 24-Hour PM <sub>10</sub> <sup>a</sup>	National 24-Hour PM <sub>10</sub> <sup>a</sup>	National 24-Hour PM <sub>2.5</sub> <sup>a</sup>
2011	52	92	67	10	0	5
2012	27	70	47	97	0	7
2013	13	38	26	86	0	6

Source: CARB 2013c

Note: Exceedances of Federal and State standards are only shown for ozone and particulate matter. All other criteria pollutants did not exceed either Federal or State standards during the years shown.

The ambient air quality data in Table 4.1.3 show that NO<sub>2</sub>, SO<sub>2</sub>, and CO levels are below the applicable State and Federal standards.

The State 1-hour O<sub>3</sub> standard was exceeded 13 to 52 times per year in the past three years. The Federal 8-hour O<sub>3</sub> standard was exceeded 26 to 47 days per year in the past three years, and the State 8-hour O<sub>3</sub> standard was exceeded 38 to 92 times per year in the past three years. The State 24-hour PM<sub>10</sub> standard was exceeded 10 to 97 days per year in the past three years, and the Federal 24-hour standard was not exceeded. The Federal 24-hour PM<sub>2.5</sub> standard was exceeded five to seven days per year in the past three years. The State annual average PM<sub>2.5</sub> standards were

exceeded in each of the last three years and the Federal annual average PM<sub>2.5</sub> standards have not been exceeded in the past three years.

#### **4.1.2 Thresholds of Significance**

Appendix G of the California Environmental Quality Act (CEQA) Guidelines (14 CCR 15000 et seq.) provides guidance for evaluating whether a development project may result in significant impacts. Based on the IS and Appendix G, the project could have a significant impact on air quality if the project would:

- Conflict with or obstruct the implementation of the applicable air quality plan;
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation;
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable Federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for O<sub>3</sub> precursors); and/or
- Expose sensitive receptors to substantial pollutant concentrations.

In addition, Appendix G of the CEQA Guidelines indicates that where available, the significance criteria established by the applicable AQMD or pollution control district may be relied upon to determine whether the project would have a significant impact on air quality. The most recent version of the SCAQMD *CEQA Air Quality Handbook* (SCAQMD 1993) sets forth quantitative emission significance thresholds below which a project would not have a significant impact on ambient air quality. Project-related air quality impacts estimated in this environmental analysis would be considered significant if any of the applicable significance thresholds presented in Table 4.1-5, SCAQMD Air Quality Significance Thresholds, are exceeded.

A project would result in a substantial contribution to an existing air quality violation of the NAAQS or CAAQS for O<sub>3</sub>, which is a nonattainment pollutant, if the project's construction or operational emissions would exceed the SCAQMD VOC or NO<sub>x</sub> thresholds shown in Table 4.1-5. These emissions-based thresholds for O<sub>3</sub> precursors are intended to serve as a surrogate for an "ozone significance threshold" (i.e., the potential for adverse O<sub>3</sub> impacts to occur) because O<sub>3</sub> itself is not emitted directly (see discussion of O<sub>3</sub> and its sources in Section 4.1.1), and the effects of an individual project's emissions of O<sub>3</sub> precursors (VOC and NO<sub>x</sub>) on O<sub>3</sub> levels in ambient air cannot be determined through air quality models or other quantitative methods.

**Table 4.1-5**  
**SCAQMD Air Quality Significance Thresholds**

Criteria Pollutants Mass Daily Thresholds		
Pollutant	Construction	Operation
NO <sub>x</sub>	100 lb/day	55 lb/day
VOCs	75 lb/day	55 lb/day
PM <sub>10</sub>	150 lb/day	150 lb/day
PM <sub>2.5</sub>	55 lb/day	55 lb/day
SO <sub>x</sub>	150 lb/day	150 lb/day
CO	550 lb/day	550 lb/day
Lead <sup>a</sup>	3 lb/day	3 lb/day
Toxic Air Contaminants and Odor Thresholds		
TACs (including carcinogens and noncarcinogens)	Maximum incremental cancer risk ≥ 10 in 1 million Hazard index ≥ 1.0 (project increment)	
Odor	Project creates an odor nuisance pursuant to SCAQMD Rule 402	
Ambient Air Quality for Criteria Pollutants <sup>b</sup>		
NO <sub>2</sub> 1-hour average NO <sub>2</sub> annual average	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 0.18 ppm (State) 0.030 ppm (State) and 0.0534 ppm (Federal)	
PM <sub>10</sub> 24-hour average PM <sub>10</sub> annual arithmetic mean	10.4 µg/m <sup>3</sup> (construction) <sup>c</sup> and 2.5 µg/m <sup>3</sup> (operation) 1.0 µg/m <sup>3</sup>	
PM <sub>2.5</sub> 24-hour average	10.4 µg/m <sup>3</sup> (construction) <sup>c</sup> and 2.5 µg/m <sup>3</sup> (operation)	
SO <sub>2</sub> 1-hour average SO <sub>2</sub> 24-hour average	0.25 ppm (State) and 0.075 ppm (Federal – 99 <sup>th</sup> percentile) 0.04 ppm (State)	
Sulfates (SO <sub>4</sub> ) 24-hour average	25 µg/m <sup>3</sup> (State)	
Ambient Air Quality for Criteria Pollutants <sup>b</sup>		
CO 1-hour average CO 8-hour average	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 20 ppm (State) and 35 ppm (Federal) 9.0 ppm (State/Federal)	
Lead 30-day average <sup>a</sup> Lead rolling 3-month average <sup>a</sup> Lead quarterly average <sup>a</sup>	1.5 µg/m <sup>3</sup> (State) 0.15 µg/m <sup>3</sup> (Federal) 1.5 µg/m <sup>3</sup> (Federal)	

Source: SCAQMD 1993.

lb/day = pounds per day; ppm = parts per million;  $\mu\text{g}/\text{m}^3$  = microgram per cubic meter;  $\geq$  = greater than or equal to

<sup>a</sup> The phasing out of leaded gasoline started in 1976; gasoline no longer contains lead.

<sup>b</sup> Ambient air quality thresholds for criteria pollutants based on SCAQMD Rule 1303, Table A-2, unless otherwise stated.

<sup>c</sup> Ambient air quality threshold based on SCAQMD Rule 403.

The phasing out of leaded gasoline started in 1976. As gasoline no longer contains lead, vehicles used in demolition activities are not anticipated to emit lead. Impacts related to lead-based paint (LBP) in the buildings to be demolished are discussed in Section 4.5 of this DEIR, *Hazards and Hazardous Materials*.

The SCAQMD *CEQA Air Quality Handbook* also sets forth additional indicators of potential air quality impacts that should be used as screening criteria indicating the need for further analysis. The additional indicators are as follows:

- Project could interfere with the attainment of the Federal or State ambient air quality standards by either violating or contributing to an existing or projected air quality violation.
- Project could result in population increases within the regional statistical area that would be in excess of that projected in the AQMP and in other than planned locations for the project's build-out year.
- Project would have the potential to create or be subjected to an objectionable odor over 10 dilutions to thresholds (D/T) that could impact sensitive receptors.<sup>1</sup>
- Project would have hazardous materials on site and could result in an accidental release of air toxic emissions or acutely hazardous materials posing a threat to public health and safety.
- Project could emit an air toxic contaminant regulated by SCAQMD rules or that is on a Federal or State air toxic list.
- Project could involve burning of hazardous, medical, or municipal waste as waste-to-energy facility.
- Project could be occupied by sensitive receptors within a quarter mile of an existing facility that emits air toxics identified in SCAQMD Rule 1401 or near CO hotspots.
- Project could emit carcinogenic or toxic air contaminants that individually or cumulatively exceed the maximum individual cancer risk of 10 in 1 million (SCAQMD 1993).

In addition to the above-listed emissions-based thresholds, the SCAQMD recommends the evaluation of localized air quality impacts to sensitive receptors in the immediate vicinity of the project as a result of construction activities. Such an evaluation is referred to as a localized significance threshold (LST) analysis. LSTs are based on the ambient concentrations of pollutants within the project Source Receptor Area (SRA) and the distance to the nearest sensitive receptor. LSTs represent the maximum emissions from a project site that are not expected to result in an exceedance of the national or State AAQS. For this project, the appropriate SRA for the localized impacts analysis is the Metropolitan Riverside County area (SRA 23).

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<sup>1</sup> This threshold would be applied to industrial and similar sources that would emit odorous substances, such as wastewater treatment plants and some chemical plants.

The localized significance for a project smaller than five acres can be determined by performing a screening-level analysis. This analysis involves use of SCAQMD look-up tables to correlate pollutant emissions rates with project size to determine if the project is likely to result in a locally significant concentration of any criteria pollutant. Since the total gross area for the project site is 3.14 acres and the distance to nearest sensitive receptors is approximately 25 meters (85 feet), the LST screening thresholds for receptors at 25 meters from a three-acre site are used in this analysis. The following are LSTs that apply to the proposed project:

### **Construction LST Thresholds, 3 acre, 85 feet distance**

- 208 lbs/day of NO<sub>x</sub>
- 1,147 lbs/day of CO
- 9.3 lbs/day of PM<sub>10</sub>
- 5.5 lbs/day of PM<sub>2.5</sub>

### **4.1.3 Project Elements That Can Reduce Impacts**

The project does not propose any design features that would reduce air quality impacts.

### **4.1.4 Environmental Impacts Before Mitigation**

***Threshold: Would the project conflict with or obstruct implementation of the applicable air quality plan?***

The project site is located within the Basin under the jurisdiction of the SCAQMD, which is the local agency responsible for administration and enforcement of air quality regulations for the area. Implementation of the project may result in emissions of short-term criteria air pollutant in conflict with the SCAQMD AQMP.

While striving to achieve the NAAQS for O<sub>3</sub> and PM<sub>2.5</sub> through a variety of air quality control measures, the Final 2012 AQMP also accommodates planned growth in the Basin. Projects are considered consistent with, and would not conflict with or obstruct implementation of, the AQMP if the growth in socioeconomic factors (e.g., population, employment) is consistent with the underlying regional plans used to develop the AQMP. The future emissions forecasts are primarily based on demographic and economic growth projections provided by SCAG. Thus, demographic growth forecasts for various socioeconomic categories (e.g., population, housing, employment by industry) developed by SCAG for their 2012 Regional Transportation Plan were used to estimate future emissions in the Final 2012 AQMP (SCAQMD 2013).

The project is limited to the demolition of existing on-site buildings. The project is not considered growth-inducing because it does not involve the development of housing nor will it

create new permanent employment. In addition, it will not create a new significant source of criteria air pollutants. The project is within the California Baptist University (CBU) Specific Plan (SP) area and is zoned for CBUSP Mixed/Urban uses. Future uses have already been found to be consistent with applicable air quality plans by the CBUSP Mitigated Negative Declaration (MND). As such, the project would not conflict with or obstruct implementation of the applicable air quality plan; impacts would be **less than significant** and no mitigation measures are necessary.

***Threshold: Would the project violate any air quality standard or contribute substantially to an existing or project air quality violation?***

The proposed project will consist of site clearing, building removal, and rough grading and will take approximately 28 workdays over a period of two to three months. Air pollutant emissions associated with the project would occur over the short term from demolition activities. The project has no long-term component. Emissions include fugitive dust from demolition, site preparation, and grading, and emissions from equipment exhaust. The following discussion identifies potential short-term construction impacts that would result from implementation of the project.

### **Regional Construction Emissions**

Construction activities produce combustion emissions from various sources, such as demolition, grading, site preparation, utility engines, and motor vehicles transporting the construction crew. The use of construction equipment on site would result in localized exhaust emissions. In addition, fugitive dust (PM<sub>10</sub> and PM<sub>2.5</sub>) emissions would primarily result from grading and site preparation activities. Consistent with SCAQMD guidelines, the project would not disturb more than five acres daily (the entire site is only 3.14 acres). Because emissions from demolition activities envisioned on-site would vary daily, the following analysis is based the peak-day emissions. Equipment assumed in the analysis is described in Table 4.1-6.

**Table 4.1-6  
Phase I Construction Equipment**

Construction Phase	Equipment	Quantity	Hours/Day	Horsepower	Load Factor
Demolition	Concrete/industrial saws	1	8	81	0.73
	Excavators	3	8	162	0.38
	Rubber-tired dozers	2	8	255	0.40
Grading	Excavators	1	8	162	0.38
	Graders	1	8	174	0.41
	Rubber-tired dozers	1	8	255	0.40
	Tractors/loaders/backhoes	3	8	97	0.37

Source: CalEEMod Defaults.

The most recent version of the CalEEMod model (Version 2013.2.2) was used to calculate the construction emissions. Required construction emission control measures, or standard conditions, have been applied to the emissions rates show in Table 4.1-7. The values in Table 4.1-7 are also combined on- and off-site emissions.

**Table 4.1-7**  
**Project Estimated Maximum Daily Construction Emissions (pounds/day)**

Construction Phase	Total Pollutant Emissions (lbs/day)					
	VOCs	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Demolition	4.6	49	37	0.043	2.77	2.36
Rough Grading	3.9	40	28	0.032	5.00	3.5
Maximum daily emissions	4.6	49	37	0.043	5.00	3.5
<i>Regional threshold</i>	<i>75</i>	<i>100</i>	<i>550</i>	<i>150</i>	<i>150</i>	<i>55</i>
<i>Localized Significance Threshold</i>	—	<i>208</i>	<i>1,147</i>	—	<i>9.3</i>	<i>5.5</i>
Threshold exceeded?	No	No	No	No	No	No

Notes: See DEIR Appendix B for complete results.

These estimates reflect control of fugitive dust required by SCAQMD Rules 402 and 403.

Table 4.1-7 indicates that regional construction emissions would not exceed the daily thresholds of any criteria pollutant emission thresholds established by the SCAQMD. The project's air pollutant emissions during on-site demolition activities and rough grading do not exceed any of the thresholds of significance established by the SCAQMD or other thresholds set forth in CEQA Appendix G. Project emissions, therefore, will not generate substantial pollutant emissions or violate any air quality standards, nor will the project result in a locally significant concentration of any criteria air pollutant. Therefore, project impacts to air quality are **less than significant**.

### Operational Emissions

The project is limited to the demolition of existing on-site buildings. There is no operational component of the project. Therefore, there is **no impact**.

***Threshold: Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable Federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?***

In considering cumulative impacts from the project, the analysis must specifically evaluate a project's contribution to the cumulative increase in pollutants for which the Basin is designated as nonattainment for the CAAQS and NAAQS. A project would be considered to have a significant cumulative impact if the project's contribution accounts for a significant proportion of the cumulative total emissions (i.e., it represents a "cumulatively considerable contribution" to

the cumulative air quality impact). If a project's emissions would exceed the SCAQMD significance thresholds, it would be considered to have a cumulatively considerable contribution to nonattainment status in the Basin. If a project does not exceed thresholds and is determined to have less than significant project-specific impacts, it may still contribute to a significant cumulative impact on air quality. In this case, the basis for analyzing the project's cumulative considerable contribution is its consistency with the AQMP.

The Basin has been designated as Federal nonattainment area for O<sub>3</sub> and PM<sub>2.5</sub> and a State nonattainment area for O<sub>3</sub>, NO<sub>2</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>. PM<sub>10</sub> and PM<sub>2.5</sub> emissions associated with construction generally result in near-field impacts. The nonattainment status is the result of cumulative emissions from all sources of these air pollutants and their precursors within the Basin.

Air pollutant emissions associated with construction activity of future projects would be reduced through implementation of control measures required by the SCAQMD. Cumulative PM<sub>10</sub> and PM<sub>2.5</sub> emissions would be reduced because all future projects would be subject to SCAQMD Rule 403 (Fugitive Dust), which sets forth general and specific requirements for all construction sites in the SCAQMD. The maximum daily PM<sub>10</sub> and PM<sub>2.5</sub> concentrations would not exceed thresholds during project construction activities, although fugitive dust and vehicle and equipment exhaust generated during project construction would contribute to the Basin nonattainment designation for PM<sub>2.5</sub>; however, this contribution would not be considered cumulatively considerable.

As discussed above, the project would not emit any criteria air pollutants above regional or localized significance thresholds. The project has also been determined to be consistent with the AQMP, since it is consistent with the underlying land use as determined by the CBUSP. It is not anticipated that any construction projects would occur concurrently in the vicinity of the project, resulting a cumulatively considerable localized impact. Therefore, the project would not have a cumulatively considerable contribution to nonattainment status in the Basin. Impacts are **less than significant**.

***Threshold: Would the project expose sensitive receptors to substantial pollutant concentrations?***

### **Localized Significance Thresholds Analysis**

Sensitive receptors are those more susceptible to the effects of air pollution than are the population at large. The SCAQMD considers that sensitive receptors may include residences, schools, playgrounds, childcare centers, long-term healthcare facilities, rehabilitation centers, convalescent centers, and retirement homes (SCAQMD 1993). The closest off-site sensitive receptors to the project site are on-campus apartments located approximately 85 feet to the west.

The project is also bordered by educational (CBU) uses to the north. Other surrounding uses, including commercial retail and transportation (SR-91) are not considered sensitive receptors.

The localized significance for a project smaller than five acres can be determined by performing a screening-level analysis. The screening-level analysis is considered more conservative than dispersion modeling. The screening analysis used SCAQMD look-up tables to correlate pollutant emissions rates with project size to determine if the project is likely to result in a locally significant concentration of any criteria pollutant. Since the total gross area for the project site is 3.14 acres and the distance to nearest sensitive receptors is approximately 25 meters (85 feet), the LST screening thresholds for receptors at 25 meters from a 3-acre site are used in this analysis. The results are shown in Table 4.1-8.

**Table 4.1-8  
LST Modeling Results – Phase I**

Pollutant	Modeled Impacts	LST Criteria	Exceeds Threshold?
	(lbs/day)	(lbs/day)	
Nitrogen dioxide (NO <sub>2</sub> )	48	208	No
Carbon monoxide (CO)	36	1,147	No
Respirable particulate matter (PM <sub>10</sub> )	4.9	9.3	No
Fine particulate matter (PM <sub>2.5</sub> )	3.5	5.5	No

As indicated in Table 4.1-8, all criteria pollutants from the project would be below localized significance thresholds. LSTs were established in order to protect the health of sensitive receptors. As the project will generate emissions below LST criteria, it would not have a significant impact to human health. Therefore, the project would not contribute to significant localized emissions of criteria air pollutants. Localized ambient air quality impacts are **less than significant**.

### **Carbon Monoxide Hotspots**

Mobile source impacts occur basically on two scales of motion. Regionally, project-related travel will add to regional trip generation and increase the vehicle miles traveled within the local airshed and the Basin. Locally, project traffic will be added to the City of Riverside roadway system near the project area. If such traffic occurs during periods of poor atmospheric ventilation, is composed of a large number of vehicles “cold-started” and operating at pollution-inefficient speeds, and is operating on roadways already crowded with non-project traffic, there is a potential for the formation of microscale CO hotspots in the area immediately around points of congested traffic. Because of continued improvement in vehicular emissions at a rate faster than the rate of vehicle growth and/or congestion, the potential for CO hotspots in the Basin is steadily decreasing.

CO transport is extremely limited and disperses rapidly with distance from the source. Under certain extreme meteorological conditions, however, CO concentrations near a congested roadway or intersection may reach unhealthy levels, affecting sensitive receptors such as residents, school children, hospital patients, and the elderly. Typically, high CO concentrations are associated with roadways or intersections operating at an unacceptable level of service (LOS). In accordance with the CO Protocol, CO hotspots are typically evaluated when (1) the LOS of an intersection or roadway decreases to LOS E or worse; (2) signalization and/or channelization is added to an intersection; and (3) sensitive receptors such as residences, schools, and hospitals are located in the vicinity of the affected intersection or roadway segment.

Projects contributing to adverse traffic impacts may result in the formation of such CO hotspots. The project's Traffic Analysis (LSA 2014; see Appendix G) evaluated whether there would be decrease in LOS (e.g., increased congestion) at local intersections and roadways. The analysis concluded that the project would not have any significant effects to the circulation network, with all roadways and intersections operating at a satisfactory LOS with project implementation. Per the Caltrans CO Protocol, a CO hotspot analysis would not be required for project study intersections and potential impacts related to high levels of CO concentrations are not anticipated.

Since the project will not significantly increase congestion in the project area, potential for CO hotspot formation is low. In addition, background CO levels in the project area are well below applicable ambient air quality standards (see Table 4.1-3). Based on this information, the project would result in a **less than significant** impact to sensitive receptors with regard to potential CO hotspots; therefore, mitigation would not be required.

#### **4.1.5 Mitigation Measures**

CEQA Guidelines Section 15126.4 requires DEIRs to describe feasible measures that can minimize significant adverse impacts. As no impacts related to air quality have been found to be potentially significant, no mitigation measures are required. Adherence to standard procedures, including SCAQMD Rules 402 and 403 will ensure all impacts are less than significant.

#### **4.1.6 Environmental Impacts After Mitigation Is Incorporated**

The analysis above indicates that the project will not exceed significance criteria for any criteria air pollutant. Therefore, all air quality impacts are **less than significant** and no mitigation measures are required.

### 4.1.7 References

14 CCR 15000–15387 and Appendices A–L. Guidelines for Implementation of the California Environmental Quality Act, as amended.

California Air Resources Board website: <http://www.arb.ca.gov>.

LSA Associates, Inc. *Traffic Analysis*. December 2014.

South Coast Air Quality Management District. Air Quality Management Plan. 2007.

———. CEQA Air Quality Handbook. April 1993.

———. Final Localized Significance Threshold Methodology. June 2003.

———. Final – Methodology to Calculate Particulate Matter (PM) 2.5 and PM<sub>2.5</sub> Significance Thresholds. October 2006.

Western Regional Climate Center website: <http://www.wrcc.dri.edu>.

## 4.2 BIOLOGICAL RESOURCES

The following analysis focuses on the potentially adverse impacts to candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or United States Fish and Wildlife Service (USFWS), resulting from implementation of the Riverside Free Methodist Church Demolition Project (proposed project). The Initial Study (IS) concluded that the project could have significant impacts to biological resources and that a Biological Resource Assessment was needed to determine these impacts. In addition to other documents, the following sources were used in the preparation of this section of the Draft Environmental Impact Report (EIR):

The following report was prepared to assess impacts to biological resources caused by the implementation of this project:

- *MSHCP Consistency Report for Demolition of the Riverside Free Methodist Church Complex*, LSA Associates, Inc. February 2015 (Appendix C).

### 4.2.1 Setting

The approximately 3.14-acre project site is located in the City of Riverside and surrounded by existing urban uses. Surrounding land uses include California Baptist University (CBU) facilities to the north and west, commercial retail buildings to the east, and State Route 91 to the south. The entire site has been previously graded and is flat, with an approximate elevation of 820 feet above mean sea level. The only soil type mapped at the site is Arlington fine sandy loam, deep, 2 to 8 percent slopes. However, due to on-site development, the site may contain fill that is inconsistent with the mapped soils.

### Existing Conditions

The proposed project site is developed as a church facility with a 3,942-square foot sanctuary, a 2,340-square foot fellowship hall, and a 3,360-square foot education building. The site contains improvements consisting of a paved parking lot, concrete walkways, ornamental landscaping, a tot lot, and undeveloped area. Total vegetation cover on the project site is approximately 10 percent consisting of ornamental trees, shrubs, and grass. No native vegetation remains within the project site or surrounding properties. Wildlife species observed during the field survey conducted by LSA (refer to Appendix C) include black phoebe (*Sayornis nigricans*), house finch (*Carpodacus mexicanus*), white-crowned sparrow (*Zonotrichia leucophrys*), bushtit (*Psaltiriparus minimus*), and mourning dove (*Zenaida macroura*). No nests or nesting behavior was observed during the survey; however, a focused nesting bird survey was not conducted and any of these, and other common species, could nest within the project site. All of the species

observed are common, widespread species and strongly adapted to human-altered landscapes with intensive urban uses.

### **Multiple Species Habitat Conservation Plan (MSHCP)**

The project site was assessed to determine consistency with the requirements of the MSHCP including Criteria Cells; conservation areas and wildlife movement corridors and linkages; Criteria Area Species Survey Areas (CASSA) for plant, bird, mammal, and amphibian species; Narrow Endemic Plants Survey Areas (NEPSSA); and survey requirements for inadequately covered species. The MSHCP also requires that an assessment be completed to determine the effects of the project on riparian/riverine areas and vernal pools, and associated protected species in accordance with MSHCP Section 6.1.2, Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools. Projects located in proximity to an MSHCP Conservation Area may result in edge effects that could adversely affect biological resources within the MSHCP Conservation area. These edge effects must be addressed according to the Urban/Wildlands Interface Guidelines (MSHCP Section 6.1.4).

The project site is within the Cities of Riverside and Norco Area Plan of the MSHCP. The project site is not within or adjacent to an MSHCP Criteria Cell, Public/Quasi Public lands, NEPSSA or CASSA, additional species survey areas, and does not contain riparian/riverine or vernal pool resources.

### **Related Regulations**

#### ***Federal***

#### **Federal Endangered Species Act (FESA)**

The Federal Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.) and subsequent amendments, provide for the conservation of endangered and threatened species and the habitats on which they depend. A federally endangered species is one facing extinction throughout all or a significant portion of its geographical range. A federally threatened species is one likely to become endangered within the foreseeable future throughout all or a significant portion of its range. The presence of any federally threatened or endangered species on a site generally imposes severe constraints on development; particularly if development would result in a “take” of the species or its habitat. The term “take” means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct. Harm in this sense can include any disturbance to habitats used by the species during any portion of its life history. The proposed project will avoid known occurrences of listed plants and habitat for listed wildlife species or otherwise mitigate potential impacts to these species.

### Migratory Bird Treaty Act

According to the Migratory Bird Treaty Act (MBTA) administered by the USFWS, the removal of active nests, eggs, or nestlings is unlawful. A violation of the MBTA may occur on, but is not limited to, projects that involve clearing or grubbing of migratory bird nest habitat during the nesting season, and demolition or reconstruction where bird nests are present. This time period is especially important due to the heightened presence of eggs or young that are essential to the survival of the species. The proposed project will comply with the MBTA and Fish and Game Code by limiting the period in which construction will take place and recommending that a nesting bird survey be completed if habitat removal is proposed during the nesting season.

### *State*

#### California Endangered Species Act (CESA)

California (Fish and Game Code 2050 et seq.) establishes that it is the policy of the State to conserve, protect, restore, and enhance threatened or endangered species and their habitats. CESA mandates that State agencies should not approve projects that would jeopardize the continued existence of threatened or endangered species if reasonable and prudent alternatives are available that would avoid jeopardy. CESA requires State lead agencies to consult with the CDFW during the California Environmental Quality Act (CEQA) process to avoid jeopardy to threatened or endangered species. CESA prohibits any person from taking or attempting to take a species listed as endangered or threatened (Fish and Game Code Section 2080). Section 2080 of the Fish and Game Code provides the permitting structure for CESA. The “take” of a State-listed endangered or threatened species or candidate species will require incidental take permits as authorized by CDFW.

The proposed project, however, is not expected to require such authorizations since it is not expected to result in “take” of a listed species. The proposed project will avoid known occurrences of listed plants and habitat for listed wildlife species or otherwise mitigate potential impacts to these species.

### *Local*

#### City of Riverside General Plan 2025

There are no General Plan (City of Riverside 2007) objectives and policies related to biological resources applicable to the proposed project.

### 4.2.2 Thresholds of Significance

Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.) provides guidance for evaluating whether a development project may result in significant impacts. Based on the IS and Appendix G, the project could have a significant impact on biological resources if the proposed project would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service;
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan.

### 4.2.3 Project Elements that Can Reduce Impacts

There are no project design features or elements that will reduce impacts to biological resources.

### 4.2.4 Environmental Impacts before Mitigation

The following discussion is provided to document the biological resources present at the project site, and provide recommendations for avoidance of impacts to resources, if present. LSA Senior Biologist Sarah Barrera conducted a site visit on November 20, 2014. Weather conditions were warm and sunny during the site visit, with a recorded temperature of 74° Fahrenheit. Winds were calm at approximately 0–2 miles per hour. Observations regarding general site conditions, vegetation, potential jurisdictional waters, and suitability of habitat for MSHCP special status plants, wildlife, and other biological resources were recorded.

***Threshold: Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?***

The biological evaluation conducted on the site (Appendix C) found no species identified as a candidate, sensitive, or special-status species on the project. However, trees and shrubs on site may provide nesting habitat for nesting birds. Therefore, the project may have direct and indirect effects to migratory birds. Direct effects may result from the removal and destruction of nesting bird habitat (e.g., trees and shrubs), and indirect effects may result from increased noise and human presence during construction activities that may cause birds to abandon nests or that may negatively affect nestlings.

Common native urban bird species that may nest in ornamental landscaping include lesser goldfinch, Brewer's blackbird (*Euphagus cyanocephalus*), northern mockingbird, common raven, American crow, Anna's hummingbird, house finch (*Carpodacus mexicanus*), and hooded oriole (*Icterus cucullatus*). In addition, there is reasonable potential for existing buildings to support nesting opportunities for native birds that are common in urbanized areas, such as American kestrel (*Falco sparverius*), house finch, black phoebe (*Sayornis nigricans*), cliff swallow (*Petrochelidon pyrrhonota*), northern rough-winged swallow (*Stelgidopteryx serripennis*), and white-throated swift (*Aeronautes saxatalis*). A few species, primarily killdeer (*Charadrius vociferus*), may choose to nest on bare ground within the project site and study area.

The ornamental trees and shrubs that occur in the developed area of the site may support nests utilized by birds protected under MBTA or the California Fish and Game Code (Sections 3503, 3503.5, and 3515), as discussed previously. Thus, the potential exists for direct and indirect construction-related disturbance for nesting birds. Mitigation Measure (MM) BIO-1 requires that nesting bird surveys are conducted prior to any ground-disturbing activities. Impacts to biological resources would be **less than significant with mitigation incorporated**.

***Threshold: Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?***

The project area consists of three buildings and improvements consisting of a paved parking lot, concrete walkways, ornamental landscaping, and a tot lot. The site also contains a disturbed, undeveloped lot. The project site has all been previously graded and is entirely flat. The project site is not within or adjacent to an MSHCP Criteria Cell, Public/Quasi Public lands, NEPSSA or CASSA, additional species survey areas, and does not contain riparian/riverine or vernal pool

resources (LSA 2015). As a result, there would be **no impact** to riparian habitat or other sensitive natural communities with implementation of the proposed project.

***Threshold: Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?***

The project area consists of three buildings and improvements consisting of a paved parking lot, concrete walkways, ornamental landscaping, and a tot lot. The site also contains a disturbed, undeveloped lot. The project site has all been previously graded and is entirely flat. No drainage features, ponded areas, or riparian habitat potentially subject to jurisdiction by the CDFW, U.S. Army Corps of Engineers (USACE), and/or Regional Water Quality Control Board (RWQCB) were found within the project site (LSA 2015). Thus, the project will not affect potential wetlands and would have **no impact** to federally protected wetlands.

***Threshold: Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?***

The project site is not within or adjacent to an MSHCP Criteria Cell, Public/Quasi Public lands, NEPSSA or CASSA, additional species survey areas, and does not contain riparian/riverine or vernal pool resources (LSA 2015). The project site is not within an established native resident or migratory wildlife corridor, and does not contain any native wildlife nursery sites. Therefore, any impacts related to the movement of native or migratory species are considered **less than significant** and no mitigation is required.

***Threshold: Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?***

The project proposes the demolition of three existing on-site buildings. As part of demolition activities, existing on-site vegetation will also be cleared. Removal of trees will follow the requirements of the Riverside Urban Tree Forest Manual. The specifications in the Manual are based on national standards for tree care established by the International Society of Arboriculture, the National Arborists Association, and the American National Standards Institute.

The City considers palm trees to be of value to the City's heritage. The proposed project includes the removal of mature palms, including 16 Mexican fan palms and two Canary Island date palms. Removal of heritage trees is addressed in Section 4.3, *Cultural Resources*, where MM CUL-5 provides for the relocation of the two Canary Island date palms and one of the Mexican fan palms.

The General Plan 2025 includes policies to ensure that future development would not conflict with any local policies or ordinances protecting biological resources, including tree preservation policies. This project has been reviewed against these policies and found to be in compliance with the policies. For these reasons, the project will have **no impact** on local policies or ordinances protecting biological resources.

***Threshold: Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?***

The project site is within the Cities of Riverside and Norco Area Plan of the MSHCP. However, the project site is not within or adjacent to an MSHCP Criteria Cell, Public/Quasi Public lands, NEPSSA or CASSA, additional species survey areas, and does not contain riparian/riverine or vernal pool resources. The project is not subject to MSHCP mitigation fees because demolition projects are exempt from the provisions of the MSHCP. Impacts related to conflict with the MSHCP are **less than significant** and no mitigation is required.

The project is within the Stephens' Kangaroo Rat Habitat Conservation Plan (SKR HCP) fee boundary, but is not within a SKR HCP core reserve. However, since this project is a demolition project it is not subject to the provisions of the SKR HCP and a payment of fees is not required. Impacts related to conflict with conservation plans are **less than significant** and no mitigation is required.

#### **4.2.5 Mitigation Measures**

CEQA Guidelines Section 15126.4 requires EIRs to describe feasible measures that can minimize significant adverse impacts. The following mitigation measure has been evaluated for feasibility and is incorporated in order to reduce potentially significant impacts related to nesting birds on site.

**MM BIO-1:** Initial ground-disturbing activities (e.g., demolition, grading) should be conducted outside the bird nesting season (February 15 through August 31). If project activities are planned during the bird nesting season, nesting bird surveys should be conducted within 30 days prior to disturbance to ensure birds protected under the MBTA are not disturbed by demolition-related activities such as noise and increased human presence.

The survey shall consist of full coverage of the on-site trees. If no active nests are found, no additional measures are required. If active nests are found, the nest locations shall be mapped by the biologist utilizing GPS equipment. The nesting bird species will be documented and, to the degree feasible, the nesting stage

(e.g., incubation of eggs, feeding of young, near fledging). The biologist shall establish a no-disturbance buffer around each active nest. The buffer will be determined by the biologist based on the species present and surrounding habitat. No construction or ground disturbance activities shall be conducted within the buffer until the biologist has determined the nest is no longer active and has informed the construction supervisor that activities may resume.

### 4.2.6 Environmental Impacts after Mitigation is Incorporated

Impacts to biological resources can be mitigated to less than significant levels by incorporating mitigation measures as described in the DEIR. No significant adverse impacts would remain after mitigation.

### 4.2.7 References

14 CCR 15000–15387 and Appendix A–L. Guidelines for Implementation of the California Environmental Quality Act, as amended.

City of Riverside Public Works Department, Urban Forestry Policy Manual. November 2007.

City of Riverside, City of Riverside General Plan 2025 Final Program Environmental Impact Report, December 2007.

City of Riverside, Riverside Municipal Code Chapter 16.72 – Western Riverside Multiple Species Habitat Conservation Plan Fee Program.

City of Riverside. 2007. *City of Riverside General Plan 2025*. November 2007.

County of Riverside Transportation and Land Management Agency. Western Riverside County Multiple Species Habitat Conservation Plan. Accessed November 20, 2014. <http://www.rctlma.org/mshcp/volume1/sec1.html#1.2>.

U.S. Department of Agriculture, Natural Resources Conservation Service. 2013. *Web Soil Survey*. Available: <http://websoilsurvey.nrcs.usda.gov/app/>. Accessed: December 8, 2014.

## 4.3 CULTURAL RESOURCES

The focus of the following discussion and analysis, based on the Initial Study/Notice of Preparation (IS/NOP) public comment period, is related to potential impacts to historical resources and archaeological resources resulting from implementation of the proposed project. The IS concluded that potential impacts related to paleontological resources were found to be less than significant and are therefore not discussed further in this Draft Environmental Impact Report (DEIR). Additionally, potential impacts related to human remains were found to be less than significant in the IS.

In addition to other documents, the following references were used in the preparation of this section of the DEIR:

- Wilkman Historical Services (WHS), *California Baptist University Free Methodist Church Property Cultural Resources Impacts Report*, November 17, 2014 (provided as Appendix D to this DEIR).
- JM Research and Consulting (JMRC), *Cultural Resources Survey, California Baptist University Specific Plan*, 2012 (excerpted in Wilkman Historical Services Report).
- Title 20 of the Riverside Municipal Code (City of Riverside 2010).
- *City of Riverside General Plan 2025* (City of Riverside 2007).

### 4.3.1 Setting

The project site is currently developed and is located in the City of Riverside (City). The natural topography of the area is valley lowland intersected by rolling hills and surrounded by mountain ranges. Most of the regional area has been developed or disturbed, and the only remaining large areas of native habitats occur along the Santa Ana River and in the Jurupa Mountains.

The project area sits on older Pleistocene alluvium (Qof) that covers Cretaceous granitic rocks. According to WHS, the soil appeared to be a medium brown silty loam; ground surface visibility was zero due to the predominance of paving, landscaping, and buildings.

### Cultural Context

The project site is situated within the traditional boundary region of two Native American groups: the Gabrieliño and the Cahuilla. The Gabrieliño were hunters and gatherers who utilized food resources (e.g., acorns, buckwheat, berries, fruit, rabbit, deer, shellfish, waterfowl) along the coast as well as inland areas of Los Angeles, Orange, San Bernardino, and Riverside Counties during ethnographic (human cultures) times. Spiritual and medical activities were guided by a shaman. The Cahuilla—who are generally divided into three groups: Desert

Cahuilla, Mountain Cahuilla, and Pass Cahuilla—inhabited the Santa Ana River area, and in areas ranging from the Salton Sink to the San Bernardino Mountains and San Geronio Pass. Cahuilla villages usually were in canyons or near sources of water and food plants. Spring Rancheria, occupied from approximately 1880 to 1900, was one of the Cahuilla villages near the project site, located on the north side of Mount Rubidoux where Spring Brook joined with the Santa Ana River. Spring Rancheria was listed in the 1889 *Riverside City Directory*, which documents that the villagers worked for nearby Riverside residents.

Additional details regarding the cultural context of the project area are included in Appendix D.

### Historical Context

**History of the Riverside Free Methodist Church.** Riverside's First Free Methodist Church (RFMC) began on October 20, 1907 when a tent meeting was conducted at what was then addressed as 165 East Eighth Street (somewhere in today's 2900 block of University Avenue). On December 19, 1907, a society was organized by Reverend W.C. Graves and church services began to be conducted at the little Seventh Day Baptist Church, at today's 2921 Sixth Street. On May 23, 1908, the church incorporated and elected five trustees. This first building for the RFMC remains to this day and is designated City Landmark 95. On March 30, 1910, the *Riverside Daily Press* announced that the RFMC had taken title to the tiny Sixth Street church property. The congregation continued to worship there until 1924.

In 1924, through the leadership of the RFMC's new pastor, Rev. Byron S. Lamson, the church bought a property at 2883 Seventh Street (now Mission Inn Avenue), situated at the northeast corner of Seventh Street and Park Avenue. The church parsonage was soon moved to the rear of the lot facing Park Avenue. Subsequently, Riverside architect Welmer P. Lamar was hired to design a new church, oriented toward Seventh Street.

Work on the new 46-foot by 60-foot building commenced on August 25, 1925, with the cost of construction estimated at \$8,000. The *Riverside Daily Press* noted that a "... Spanish design will be followed throughout the building, providing 14 Sunday school rooms, in addition to an auditorium. Eleven of the Sunday school rooms can be opened into the main auditorium for overflow purposes." Victor E. Larson, builder of Free Methodist Churches in Ontario and Chino was the builder. Dedication of the church building occurred on December 20, 1925, with Bishop Walter Sellew leading the ceremonies. Significant growth was experienced at the new church and contributions from the congregation allowed the ceremonial burning of the mortgage in 1947.

In 1958 the RFMC began to explore the construction of a new church, making an early commitment to this endeavor by purchasing a lot at 2844 Jane Street on which to build a new

parsonage. Ramond Flory was hired to design and build a new parsonage, which was completed in November of that year.

On November 3, 1960, the RFMC bought the proposed project site at 8431 Diana Avenue. At that time, the property contained 4.15 acres and had a purchase price of \$29,000. About a year later, the church hired Riverside architect Dale Bragg to design a new church complex for the property. On September 4, 1962, the Seventh Street church was sold to Grace Bible Church for \$37,750. A building permit for the sanctuary and fellowship hall at the new Diana Avenue site was issued on June 21, 1963. Local contractor Harry Marsh was listed as the contractor. To help fund construction, a loan for \$91,000 was obtained from Sierra Savings and Loan Company of San Bernardino. Construction was completed in August of 1963 and a Final Inspection was completed on August 25, 1964.

On Palm Sunday, March 22, 1964, the first services were held in the new Sanctuary. Dedication of the new church took place on May 10, 1964, with over 300 people in attendance. Among those participating in the dedication was Robert T. Anderson, Riverside County's long-term Administrator. Anderson was listed in the program as responsible for the "Civic Greeting." The overall cost of this first stage of the church's building program was pegged at \$150,000.

In the fall of 1977, the congregation decided to build an education building. The Building Committee hired architect George Stoops to design the building, a 30-foot by 112-foot building divided into children's classrooms, a pre-school serving children through the 6<sup>th</sup> grade, and a youth room. Hefley Brothers Construction submitted the winning bid of \$122,000 to erect the building.

In an effort to help fund the new building, the church sold its undeveloped rear acre to California Baptist College for \$10,000. An additional \$10,000 was raised through the congregation and with a \$115,000 loan from the Conference Revolving Loan Fund. The existing church mortgage of \$23,000 was also paid off. A building permit was applied for in March of 1979 and a groundbreaking ceremony for the Margaret Petcher Education Building was held on September 23, 1979.

Construction commenced in October of 1979, and on December 26, 1979, the new Education Building was issued a final inspection. Pastor Ben C. Anibal led the Dedication Services on March 30, 1980.

The namesake of the building, Margaret H. Petcher, moved to Riverside from St. Louis, Missouri shortly after her marriage in 1927. Initially a member of another Riverside church, she later joined her mother and daughters who preceded her in becoming members of the RFMC.

Margaret worked in the Children's Departments for some 30 years from 1940 to 1970. She was especially known for her piano playing and her "... beautifully visualized stories." After retiring

in 1970, she continued to assist in Sunday school work for an additional two years. Her full-time employment was with the Riverside County Welfare Department, where she worked from 1944 to 1966. Margaret died on October 20, 1979, in Tucson, Arizona.

On October 20, 2007, the RFMC celebrated its 100<sup>th</sup> anniversary. The program for the anniversary services included a summary history of the RFMC and a “roster” of the 28 pastors who had served the church up to that point. Four “Centennial Events” were held, with a kick-off on September 30, a buffet luncheon on October 20, a brunch on October 21, and a worship service on October 21, 2007.

Now, the RFMC is poised to start a new chapter in its history, the impetus for this has come about from its neighbor, CBU. In the last decade through to the present, CBU has experienced historic growth in enrollment. CBU has built substantial campus improvements and acquired additional properties in the vicinity of the campus in order to accommodate the needs of such growth.

In or about 2012, RFMC approached CBU about selling its property to CBU and relocating its church to another site. In July 2014, CBU acquired the RFMC site from RFMC and, concurrently, RFMC acquired a CBU-owned church property located at 8223 California Avenue (the site of the former Grace Baptist Church). Currently, RFMC is leasing its former church site on Diana Avenue from CBU until it has completed the improvements to its new California Avenue facility, scheduled for completion in the first quarter of 2015.

### **Related Regulations**

#### ***Federal***

#### **National Register of Historic Places**

According to the *Guidelines for Completing National Register of Historic Places Forms* (NPS 1991), National Register of Historic Places (National Register) listing is intended for historical architecture, archaeology, engineering, or cultural entities that are expressed in a site, building, structure, district, or object. The National Register is not solely limited to entities with importance at the national level, but is also applicable to resources at the local and state levels. To qualify for National Register listing, a resource must meet one or more of the following criteria:

- A. Association with events which have made a significant contribution to the broad patterns of our history.
- B. Association with the lives of persons significant in our past.

- C. Embodiment of the distinctive characteristics of a type, period, or method of construction or that represents the work of a master, or that possesses high artistic values, or that represents a significant and distinguishable entity whose components may lack individual distinction.
- D. Having yielded, or being likely to yield, information important in prehistory or history (NPD 1991).

However, it is not enough for a resource to meet one or more of the above criteria. It must also exhibit integrity. National Register Bulletin 15 defines *integrity* as “the ability of a property to convey its significance” (NPS 1991). The following integrity criteria are used by the federal government:

- Location: The historical location of the property or event.
- Design: The historical form, layout, and style of the property.
- Setting: The physical context.
- Materials: The items that were placed in a specific time period/configuration.
- Workmanship: The craftsmanship of the entity’s creators.
- Feeling: The expression of the historic sense of a time period.
- Association: The link between a historical event/person and property.

Not all of the integrity criteria must be met for a resource to be eligible for listing. A resource must, however, retain enough integrity to convey its historical significance.

The National Register sets as a guideline that a resource should be 50 years old or older to be considered a listing. However, an allowance may be made for younger resources to qualify for listing provided they are of exceptional significance.

#### The Secretary of the Interior’s Standards for Treatment of Historic Properties

The Secretary of the Interior’s Standards for Treatment of Historic Properties (Standards) are historic preservation principles that include concepts about maintaining, repairing and replacing historic materials, and designing new additions or making alterations. The Standards include guidelines that provide general design and technical recommendations to assist in applying the Standards to a specific property. The Standards provide four approaches to the treatment of historic properties: preservation, rehabilitation, restoration, and reconstruction. The most common Standards used for the treatment of historic properties in CEQA are the Rehabilitation Standards. These include:

1. A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces, and spatial relationships.

2. The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided.
3. Each property will be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties, will not be undertaken.
4. Changes to a property that have acquired historic significance in their own right will be retained and preserved.
5. Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.
6. Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture, and, where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.
7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.
8. Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.
9. New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work will be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.
10. New additions and adjacent or related new construction will be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

When repair and replacement of deteriorated features are necessary, alterations or additions to the property are planned for a new or continued use, and when its depiction at a particular period of time is not appropriate, Rehabilitation may be considered as a treatment or a mitigation measure under CEQA.

## *State*

### California Register of Historical Resources

A resource is considered by the City to be historically significant if the resource meets any of the criteria for designations listed in the California Register of Historical Resources (California Register):

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
2. Is associated with the lives of persons important in our past.
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
4. Has yielded, or may be likely to yield, information important in prehistory or history (California Public Resources Code Section 5024.1, 14 CCR 4852).

California resources listed in the National Register are automatically listed in the California Register.

### Senate Bill 18

The Local and Tribal Intergovernmental Consultation process, commonly known as Senate Bill (SB) 18 was signed into law in September of 2004 and took effect on March 1, 2005. SB 18 established responsibilities for local governments to contact, provide notice to, refer plans to, and consult with California Native American Tribes. The purpose of this consultation process is to protect the identity of the cultural place and to develop appropriate and dignified treatment of the cultural place in any subsequent project. The consultation is required whenever a general plan, specific plan, or open space designation is proposed for adoption or to be amended. As part of the application process, California Native American Tribes must be given the opportunity to consult with the applicant of the proposed project and with the City for the purpose of preserving, mitigating impacts to, and identifying cultural places located on project land within the City's jurisdiction.

## *Local*

### Title 20

The City has developed a historical preservation program that is among the most active in the State of California. Riverside's commitment to historical preservation began in 1969 with the

adoption of a preservation ordinance, Title 20 of the Municipal Code, and the creation of the Cultural Heritage Board. Since that time the program has grown to include an ongoing process to survey, record, and designate historical resources; an award-winning historical resources inventory database; historic district design guidelines; educational programs; and a historical preservation plan. The California Office of Historic Preservation has designated Riverside as a Certified Local Government. This distinction ensures that the City's preservation program meets all State and Federal standards.

Title 20 of the Riverside Municipal Code is the primary body of local historical preservation laws. The purpose of Title 20 is to promote the public health, safety, and general welfare by providing for the identification, protection, enhancement, perpetuation and use of improvements, buildings, structures, signs, objects, features, sites, places, areas, districts, neighborhoods, streets, works of art, natural features, and significant permanent landscaping having special historical, archaeological, cultural, architectural, community, aesthetic, or artistic value in the City. Title 20 of the Riverside Municipal Code establishes procedures for preserving, protecting, and designating significant cultural resources should the resource be considered a historical/cultural resource (City of Riverside 2010).

The City of Riverside has two levels of individual historical designation: Cultural Heritage Landmark and Resource or Structure of Merit. The Landmark designation is the City's highest historical designation, while the Resource or Structure of Merit designation is for resources of a lower level of significance. The following are the criteria for these two types of resources as defined in the Cultural Resources Ordinance of the City of Riverside Municipal Code, Title 20, Section 20.50, (City of Riverside 2010, Ordinance 7108) as amended:

Cultural Heritage Landmark Criteria: "Landmark" means any Improvement or Natural Feature that is an exceptional example of a historical, archaeological, cultural, architectural, community, aesthetic or artistic heritage of the City, retains a high degree of integrity, and meets one or more of the following criteria:

1. Exemplifies or reflects special elements of the City's cultural, social, economic, political, aesthetic, engineering, architectural, or natural history;
2. Is identified with persons or events significant in local, state or national history;
3. Embodies distinctive characteristics of a style, type, period or method of construction, or is a valuable example of the use of indigenous materials or craftsmanship;
4. Represents the work of a notable builder, designer, or architect, or important creative individual;
5. Embodies elements that possess high artistic values or represents a significant structural or architectural achievement or innovation;

6. Reflects significant geographical patterns, including those associated with different eras of settlement and growth, particular transportation modes, or distinctive examples of park or community planning, or cultural landscape;
7. Is one of the last remaining examples in the City, region, State, or nation possessing distinguishing characteristics of an architectural or historical type of specimen; or
8. Has yielded or may likely to yield, information important in history or prehistory.

Resource or Structure of Merit Criteria: “Resource or Structure of Merit” means any Improvement or Natural Feature which contributes to the broader understanding of the historical, archaeological, cultural, architectural, community, aesthetic or artistic heritage of the City, retains sufficient integrity, and:

1. Has a unique location or singular physical characteristics or is a view or vista representing an established and familiar visual feature of a neighborhood community or of the City;
2. Is an example of a type of building which was once common but is now rare in its neighborhood, community or area;
3. Is connected with a business or use which was once common but is now rare;
4. A Cultural Resource that could be eligible under Landmark Criteria no longer exhibiting a high level of integrity, however, retaining sufficient integrity to convey significance under one or more of the Landmark Criteria;
5. Has yielded or may be likely to yield, information important in history or prehistory; or
6. An improvement or resource that no longer exhibits the high degree of integrity sufficient for Landmark designation, yet still retains sufficient integrity under one or more of the Landmark criteria to convey cultural resource significance as a Structure of Merit.

Historic District: The City of Riverside defines a Historic District as:

1. A concentration, linkage, or continuity of cultural resources, where at least fifty percent of the structures or elements retain significant history integrity (a “geographic Historic District”), or
2. A thematically-related grouping of cultural resources which contribute to each other and are unified aesthetically by plan or physical development, and which have been designated or determined eligible for designation as a historic district by the Historic Preservation Officer, Board, or City Council, or is listed in the National Register of Historic Places or the California Register of Historical Resources, or is a California Historical Landmark or a California Point of Historical Interest (a “thematic Historic District”).

In addition to either 1 or 2 above, the area also:

1. Exemplifies or reflects special elements of the City's cultural, social, economic, political, aesthetic, engineering, architectural, or natural history;
2. Is identified with persons or events significant in local, State, or national history;
3. Embodies distinctive characteristics of a style, type, period, or method of construction, or is a valuable example of the use of indigenous materials or craftsmanship;
4. Represents the work of notable builders, designers, or architects;
5. Embodies a collection of elements of architectural design, detail, materials, or craftsmanship that represents a significant structural or architectural achievement or innovation;
6. Reflects significant geographical patterns, including those associated with different eras of settlement and growth, particular transportation modes, or distinctive examples of park or community planning;
7. Conveys a sense of historic and architectural cohesiveness through its design, setting, materials, workmanship or association; or
8. Has yielded or may be likely to yield, information important in history or prehistory.

Contributors and Non-Contributors: Within a historic district, resources are identified as either “contributors” or “non-contributors.” These are identified as follows:

“Contributors” to either a Historic District or a Neighborhood Conservation Area means a building structure within a Historic District or Neighborhood Conservation Area that provides appropriate historic context, historic architecture, historic association or historic value, or is capable of yielding important information about the period. Contributors in Historic Districts and Neighborhood Conservation areas are subject to the Certificate of Appropriateness Process.

“Non-Contributor” to either a Historic District or a Neighborhood Conservation Area means a building structure within a Historic District or Neighborhood Conservation Area that does not provide appropriate historic context, historic architecture, historic association, or historic value, or is not capable of yielding important information about the period, because that building structure:

1. Was not present during the district's or area's period of historic significance; or
2. No longer possesses integrity due to alterations, disturbances, additions, or other changes; and
3. Does not independently meet the designation criteria as defined in this Title.

In accordance with Title 20, a Certificate of Appropriateness is required to alter, demolish, or relocate properties that are designated or determined eligible for designation as a City Cultural Resource.

#### City of Riverside General Plan 2025

In 1994, the City's General Plan (GP) was adopted and included historical preservation goals and policies that addressed preserving the City's historical and architecturally significant structures and neighborhoods and supporting and enhancing its arts and cultural institutions. In 2007, with the GP 2025, the City adopted a new GP, while still maintaining a Historic Preservation Element. The following policies related to the proposed project are from the City's GP 2025 Historic Preservation Element:

- Objective HP-1:** To use historic preservation principles as an equal component in the planning and development process.
- Policy HP-1.1:** The City shall promote the preservation of cultural resources to ensure that citizens of Riverside have the opportunity to understand and appreciate the City's unique heritage.
- Policy HP-1.3:** The City shall protect sites of archaeological and paleontological significance and ensure compliance with all applicable State and Federal cultural resources protection and management laws in its planning and project review process.
- Policy HP-1.4:** The City shall protect natural resources such as geological features, heritage trees, and landscapes in the planning and development review process and in park and open space planning.
- Policy HP-2.1:** The City shall actively pursue a comprehensive program to document and preserve historic buildings, structures, districts, sites (including archaeological sites), objects, landscapes, and natural resources.
- Policy HP-2.2:** The City shall continually update its identification and designation of cultural resources that are eligible for listing in local, state and national registers based upon the 50 year age guideline for potential historic designation eligibility.
- Policy HP-2.3:** The City shall provide information to citizens and the building community about what to do upon the discovery of archaeological resources and burial sites, as well as, the treatment, preservation, and repatriation of such resources.

- Objective HP-4:** To fully integrate the consideration of cultural resources as a major aspect of the City's planning permitting and development activities.
- Policy HP-4.1:** The City shall maintain an up-to-date database of cultural resources and use that database as a primary informational resource for protecting those resources.
- Policy HP-4.3:** The City shall work with the appropriate tribe to identify and address, in a culturally appropriate manner, cultural resources and tribal sacred sites through the development review process.
- Objective HP-5:** To ensure compatibility between new development and existing cultural resources.
- Policy HP-5.1:** The City shall use its design and plot plan review processes to encourage new construction to be compatible in scale and character with cultural resources and historic districts.
- Policy HP-7.2:** The City shall incorporate preservation as an integral part of its specific plans, general plan, and environmental processes (City of Riverside 2007).

### 4.3.2 Thresholds of Significance

Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.) provides guidance for evaluating whether a development project may result in significant impacts. Based on the IS prepared for the project and Appendix G, a development project could have a significant impact on cultural resources if the proposed project would:

- Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5.
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.

### 4.3.3 Project Elements That Can Reduce Impacts

The project does not contain any design elements to reduce impacts to cultural resources.

### 4.3.4 Environmental Impacts Before Mitigation

Records searched included those on file at the City of Riverside Planning Department, City of Riverside Local History Resource Center, Riverside Metropolitan Museum, Eastern Information Center, University of California at Riverside, Los Angeles Public Library, County of Riverside Assessor, Social Security Death Index, California Death Index, Federal Census, and various Internet web sites.

***Threshold: Would the project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?***

JM Research and Consulting (JMRC) prepared a cultural resources survey in 2012 in conjunction with the CBUSP. While Federal guidelines generally use a 50-year benchmark for evaluating potential historic resources, JMRC evaluated all potential resources 45 years old or older and those that would be 45 years old or older by the 2025 horizon of the Specific Plan. JMRC's work included a cultural resources records search, literature review, and intensive field survey. The Riverside City Planning Division conducted a Sacred Lands Records Search with the Native American Heritage Commission (NAHC) and Native American Consultation in support of the cultural resources survey and in conjunction with the approval of the CBUSP per SB 18.

#### ***Project- and Program-Level Elements***

JMRC evaluated 18 resources spanning the period from 1875 through the 1980s for potential eligibility for National Register, California Register, and local historic designation. Of the properties evaluated, nine were found ineligible for historic designation, three were documented to have previously been designated or found eligible for historic designation, and four properties were found eligible for individual or historic district designation. One of these properties was the Riverside Free Methodist Church at 8431 Diana Avenue, the proposed project site, which was described as eligible for Local Structure of Merit designation. As noted previously, although CBU did not own the site and no project was proposed at the time the CBUSP was approved, the site is within the boundary of the CBUSP.

The RFMC Sanctuary and Fellowship Hall are the contributors to the historic resource at the project site. The following is a detailed description of the two buildings, excerpted from the WHS Cultural Resources report.

#### **On-Site Historical Resources**

**The Sanctuary:** The Sanctuary is a Mid-Century Modern building with a square floor plan situated on a concrete slab foundation. The distinctive composition shingle sheathed pyramid shaped roof extends up to its peak in four graceful arcs corresponding with each face of the building. Substantial sheet metal clad battens highlight the arcs, each beginning at a major roof support beam and terminating at crown-like features at the east and west ends of the roof peak. Extending up from the westerly most crownlike feature is a simple cross, made of square metal tubing. At the base of the roof is a wide wooden fascia, broken at each corner and at the center of each building face by the supporting beams of the roof, each clad with sheet metal. Substantial soffits shade a concrete walkway extending around the perimeter of the building, with each soffit finished with rough sawn plywood divided into rectangular modules with rough sawn wood battens.

The westerly building wall is clad in Boquet Canyon stone veneer, broken in the center by the Sanctuary entrance. This entrance consists of two adjacent sets of double doors, flanked on each side by double banks of sidelights, consisting of large square panes of glass framed in wood. The balance of the elevations is relatively utilitarian. The north and south elevations are characterized by short returns of the west elevation's stone veneer, with the balance of the walls consisting of smooth sand-finish stucco panels broken by single wood doors, each flanked to the left with a single bank of sidelight windows, similar in design to those at the front elevation. The east elevation consists of a stucco wall broken by two wooden restroom doors and one pair of wooden utility doors. The restroom doors are flanked on each side by sidelight windows identical to those found on the north and south elevations.

The Sanctuary interior is a dramatic space, dominated by the arc shape of the exterior roof. Its plaster ceiling is broken into segments by the natural wood of the supporting beams. The starkness of the interior's plaster walls is given a sense of warmth and richness by natural wood doors, wood-framed windows (both clear and stained glass), wood-faced soffits with indirect lighting, and natural wood pews. The raised chancel of the worship hall has a stage-like appearance, framed in natural wood and with a fabric white and green curtain at its rear centered on a cross. Another cross is centered above the chancel. Spaces not devoted to the worship hall space include a narthex, crying room, offices, library, restrooms, and utility rooms.

**Fellowship Hall:** The Fellowship Hall has a simple rectangular floor plan and is situated on a concrete slab foundation. Overall, the building has a utilitarian appearance with minor embellishments that reflect some of the details on the Sanctuary. The Fellowship Hall's hipped roof is clad with composition shingles and divided into segments by sheet metal covered battens similar to those on the sanctuary. The perimeter of the roof is accented with wide fascia boards. The wide walkway shading soffits are clad in rough sawn plywood divided into segments by battens, similar to the soffit treatment of the Sanctuary. Roof mounted HVAC units provide heating and cooling to each classroom.

All of the building's exterior walls are finished with a smooth sand-finish stucco. The west elevation is broken by windows and doors leading to classrooms. Each classroom is accessed by a solid wood door, and each door is flanked by an aluminum framed slider window to the right. The south elevation is an unbroken stucco wall, while the north elevation's stucco wall is penetrated by two utility doors. The east elevation has the same classroom door/window treatment as the west elevation toward its southerly end, while the northerly end is penetrated by three utility doors.

Further specifics of each contributor, including photographs, can be found in the cultural report in Appendix D. Refer to previously referenced Figures 2.1, 2.2, 2.3 (or the figures contained in the cultural resources report, EIR Appendix D), for the location and photographs of each building.

The church and fellowship hall were built in 1963–1964. While JMRC described the architectural style of the Sanctuary as “Googie,” the WHS report characterized it as an example of Mid-Century Modern architecture. The architect for the church and fellowship hall was Dale V. Bragg, who lived and practiced in Riverside. The JRMC report describes his work as follows:

Among his principal works are University House (1959); the Purchasing Department Facilities building (1963) and Corporate Yard (1964) for the University of California (Stadtman 1967); the Riverside County Administration building in Elsinore (1962); and the Mile Square Building (1961), First American Title Insurance Company building (1961), and the Hyatt Elementary School in partnership with Maynard Lyndon (1963) in Riverside. In addition to service in the U.S. Navy (1945–1946), Bragg’s public contribution includes service on the Riverside Planning Commission from 1962–64 and as campus architect for the Riverside Junior College District, now Riverside Community College, from 1964–69 (A.I.A 1970:96). Working primarily in a number of modern styles, the Riverside Free Methodist Church building may exhibit Bragg’s greatest achievement in Modernism. The level of design of the church building, which exhibits the clear stylistic intent of the Modernist movement, achieves monumentality by boldly demonstrating in dramatic physical form its abstract spiritual function through deconstructive roof elements, a technique seen widely in post-WWII religious architecture. In addition, the design of the church, which minimizes religious iconography, and the presence of the fellowship hall physically epitomize the postwar religious climate as local parishes took on the role of providing social as well as spiritual services and intercourse demanded by swelling, underserved postwar congregations (CAJA 2009:35). Comparatively, the compatible fellowship hall, a common companion of postwar churches, is reduced in design and stature, and the 1979 classroom addition is unrelated in style and craftsmanship and does not appear to have been architect-designed; the builder is unknown. The property lacks the level of architectural distinction and historic association to merit listing in the [National Register] or [California Register], but contributes to the broader understanding of the cultural and architectural heritage of the City and has unique singular physical characteristics (Criterion 1), therefore, appearing eligible for local designation as a Structure of Merit. The potential for a higher level of individual local designation or inclusion in a local or higher level thematic district may exist, but modern church-related architecture and development in Riverside has not been previously intensively examined and is beyond the scope of this study; however, based on the integrity of its design and historic associations and the guidelines established by the

reconnaissance-level Riverside Modernism study (CAJA 2009:35-36), the property appears likely to be eligible for inclusion in a thematic district and should be reconsidered if such a study is later completed. The property does not appear to be associated with the development of California Baptist University (CBU) or the campus and is not eligible for inclusion in the CBU Historic District. Accordingly, the property is assigned a CHR Status Code of 5S2 – “Individual property that is eligible for local listing or designation.

The JMRC report identified the Sanctuary, Fellowship Hall, and on-site mature palm trees as contributors to the historic resource. The later WHS study clarified with JMRC the description of the palms, determining that the referenced trees consisted of eight palms that were existing at the time of the church’s construction and ten additional palms planted by the church as part of its landscaping. Since the JMRC report did not provide support for the trees’ historic resource status, WHS re-evaluated their significance and concluded that the trees do not form an important aspect of the RFMC landscape. According to the WHS report, the newer palms are not part of a distinctive site landscaping concept, and the older palms are remnant landscaping that lack historical significance. The WHS report determined that the palms were therefore not contributors to the historic resource. CBU will, nonetheless, relocate the property’s two Canary Island date palms and one of its Mexican fan palms in order to fill in gaps among the trees in CBU’s historic Palm Drive.

The proposed project consists of the demolition of on-site buildings, site clearing, and rough grading in preparation for future uses consistent with the CBUSP. The JMRC report found RFMC eligible for Structure of Merit status and based on this, Title 20 defines the property as a Cultural Resource, which is a historic resource under CEQA. The WHS report concurred with this information. Under CEQA, the demolition of a historic resource cannot be mitigated to a level of less than significant. Mitigation Measures (MM) CUL 1 through 5 would reduce impacts. These measures would document the historic church, allow for salvage of architectural material, and relocate three of the mature palm trees. However, even after mitigation, impacts to historic resources would be **significant and unavoidable**.

***Threshold: Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?***

This cultural and historic evaluation is based on a records and literature search at the Eastern Information Center (EIC), located in the Anthropology Department of University of California Riverside. This records search included the subject property and a one-mile radius beyond the boundaries of the subject property. An intensive pedestrian survey of the entire project site was conducted. Ground surface visibility was limited due to extensive paved surfaces and the ground covered by the buildings. No archaeological resources were noted during this survey. Letters

were sent to the NAHC and to a list of tribes provided by the NAHC, requesting comments on the project.

### ***Project- and Program-Level Elements***

The records search at the EIC identified no known archaeological resources on the project site. Consultation with the NAHC also identified no known Native American sites on the church property. Individual tribes were also notified and offered an opportunity to comment; however, as of the completion of the WHS report, no responses had been received.

The project site is a portion of a larger property that was developed and used as a farm from sometime before 1892 through approximately 1956, when construction of State Route 91, the Riverside Freeway, was initiated. There is a chance subsurface deposits related to the farm may exist on this property; however, previous disturbance for grading and construction of church improvements make the likelihood somewhat remote. Nonetheless, since there is potential for subsurface archaeological deposits, MM CUL-6 shall be implemented in order to preserve any unearthed archaeological resources. Impacts to archaeological resources are considered **less than significant with mitigation incorporated**.

### **4.3.5 Mitigation Measures**

The following mitigation measures are recommended to reduce impacts to cultural resources, consistent with guidance provided in CEQA Guidelines, Section 15064.5:

**MM CUL-1:** Prior to the issuance of a demolition permit, California Baptist University (CBU) shall produce evidence it has hired a qualified professional and funded the preparation of a HABS Level II (35 mm photography) documentation of the property. The report shall be submitted to the City of Riverside Historic Preservation staff for review and approval prior to the issuance of a demolition permit.

**MM CUL-2:** Prior to issuance of a demolition permit, and in cooperation with the RFMC, CBU shall produce evidence it has hired a qualified graphic arts professional and funded the preparation of a digital version of the church history book titled “The Riverside Free Methodist Church Record.” CBU shall secure RFMC’s approval of the final design of the document. CBU shall also provide the church with a copy of the digital file and 125 bound copies of the document prior to the issuance of a building permit for the future use of the property.

**MM CUL-3:** Prior to issuance of a demolition permit, CBU shall produce evidence it has hired a qualified professional to design an interpretive plaque, describing and

illustrating the history of RFMC. The design and text of the plaque shall be subject to the approval of the Riverside Historic Preservation staff and RFMC. The design, fabrication, and installation shall be paid for by CBU, and shall be coordinated with the design and completion of the future use of the site. The interpretive plaque shall be on or in the immediate vicinity of the RFMC site.

**MM CUL-4:** Prior to issuance of a demolition permit, CBU shall provide for architectural salvage from the Sanctuary, with the first priority given to RFMC. Once RFMC has identified what it wants to salvage, CBU shall give a nonprofit historic preservation advocacy group an opportunity to identify what it wants to salvage. All salvage operations shall be completed within 45 days of notice to RFMC and the historic preservation advocacy group identified CBU.

**MM CUL-5:** CBU shall annotate on the demolition plans for the RFMC property, the relocation of the two *Phoenix canariensis* and one of the *Washingtonia robusta* palm trees from the church property to fill in gaps among the trees on Palm Drive as specified in Figure 31 of the WHS cultural resources report.

**MM CUL-6:** Should archaeological resources be unearthed during project activities, all work must be halted and redirected until a qualified archaeologist can examine the site and determine an appropriate course of action.

### 4.3.6 Environmental Impacts After Mitigation Is Incorporated

Impacts to archaeological resources can be mitigated to less than significant levels by incorporating mitigation measures as described in Section 4.3.5 of this DEIR. However, the impact caused by the demolition of the Riverside Free Methodist Church historic resource cannot be feasibly mitigated to a level less than significant. Therefore, this impact is **significant and unavoidable**. A Statement of Overriding Consideration is required.

### 4.3.7 References

14 CCR 15000–15387 and Appendices A–L. Guidelines for Implementation of the California Environmental Quality Act, as amended.

California Public Resources Code Section 5024.1. State Parks and Monuments: Historical Resources.

City of Riverside. 2007. *City of Riverside General Plan 2025*. Adopted November 2007. Riverside, California: City of Riverside Community Development Department.

City of Riverside. 2010. Riverside Municipal Code: Title 20 – Cultural Resources. Adopted December 2010.

NPS (National Park Service). 1991. *Guidelines for Completing National Register of Historic Places Forms*. National Register Bulletin 16, Part A. U.S. Department of the Interior, National Park Service.

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## 4.4 GREENHOUSE GASES

The focus of the following discussion and analysis, based on the Initial Study (IS) and Notice of Preparation (NOP) public comment period, concerns the potentially adverse impacts related to greenhouse gas (GHG) emissions during the Riverside Free Methodist Church Demolition Project (proposed project).

In addition to other documents, the following sources were used in the preparation of this section of the Draft Environmental Impact Report (EIR):

- *Air Quality and Greenhouse Gas Emissions Analysis*, LSA Associates, Inc., December 2014 (Appendix B).

### 4.4.1 Setting

Climate change refers to any significant change in measures of climate, such as temperature, precipitation, or wind, lasting for an extended period (decades or longer). Gases that trap heat in the atmosphere are often called GHGs. The greenhouse effect traps heat in the troposphere through a threefold process: short-wave radiation emitted by the sun is absorbed by the Earth; the Earth emits a portion of this energy in the form of long-wave radiation; and GHGs in the upper atmosphere absorb this long-wave radiation and emit it into space and back toward the Earth. This “trapping” of the long-wave (thermal) radiation emitted back toward the Earth is the underlying process of the greenhouse effect.

Principal GHGs include carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), ozone (O<sub>3</sub>), and water vapor (H<sub>2</sub>O). Some GHGs, such as CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O, can occur naturally and are emitted into the atmosphere through natural processes and human activities. Of these gases, CO<sub>2</sub> and CH<sub>4</sub> are emitted in the greatest quantities from human activities. Emissions of CO<sub>2</sub> are largely byproducts of fossil-fuel combustion, whereas CH<sub>4</sub> results mostly from off-gassing associated with agricultural practices and landfills. Man-made GHGs, which have a much greater heat-absorption potential than CO<sub>2</sub>, include fluorinated gases, such as hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF<sub>6</sub>), and nitrogen trifluoride (NF<sub>3</sub>), which are associated with certain industrial products and processes (CAT 2006).

The greenhouse effect is a natural process that contributes to regulating the Earth’s temperature. Without it, the average temperature of the Earth would be about 0°F (–18°C) instead of its current 57°F (14°C). Global climate change concerns are focused on whether human activities are leading to an enhancement of the greenhouse effect.

The effect each GHG has on climate change is measured as a combination of the mass of its emissions and the potential of a gas or aerosol to trap heat in the atmosphere, known as its global

warming potential (GWP). The GWP varies between GHGs; for example, the GWP of CH<sub>4</sub> is 21, and the GWP of N<sub>2</sub>O is 310. Total GHG emissions are expressed as a function of how much warming would be caused by the same mass of CO<sub>2</sub>. Thus, GHG gas emissions are typically measured in terms of pounds or tons of CO<sub>2</sub> equivalent (CO<sub>2</sub>E).<sup>1</sup>

### Contributions to Greenhouse Gas Emissions

In 2011, the United States produced 6,702 million metric tons (MMT) of CO<sub>2</sub>E (EPA 2013). The primary GHG emitted by human activities in the United States was CO<sub>2</sub>, representing approximately 84 percent of total GHG emissions. The largest source of CO<sub>2</sub>, and of overall GHG emissions, was fossil-fuel combustion, which accounted for approximately 94 percent of the CO<sub>2</sub> emissions.

According to the 2010 GHG inventory data compiled by California Air Resources Board (CARB) for the California Greenhouse Gas Inventory for 2000–2010, California emitted 452 MMT CO<sub>2</sub>E of GHGs, including emissions resulting from out-of-state electrical generation (CARB 2013). The primary contributors to GHG emissions in California are transportation, electric power production from both in-state and out-of-state sources, industry, agriculture and forestry, and other sources, which include commercial and residential activities. These primary contributors to California's GHG emissions and their relative contributions in 2010 are presented in Table 4.4-1, GHG Sources in California.

**Table 4.4-1  
GHG Sources in California**

Source Category	Annual GHG Emissions (MMT CO <sub>2</sub> E)	% of Total <sup>a</sup>
Agriculture	32.45	7.2%
Commercial uses	14.40	3.2%
Electricity generation	93.30 <sup>b</sup>	20.7%
Forestry (excluding sinks)	0.19	0.0%
Industrial uses	85.96	19.0%
Recycling and waste	6.98	1.5%
Residential uses	29.38	6.5%
Transportation	173.18	38.3%
High GWP substances	15.66	3.5%
<b>Totals<sup>c</sup></b>	<b>451.60</b>	<b>100%</b>

Source: CARB 2013.

<sup>a</sup>Percentage of total has been rounded.

<sup>b</sup>Includes emissions associated with imported electricity, which account for 43.59 MMT CO<sub>2</sub>E annually.

<sup>c</sup>Totals may not sum due to rounding.

<sup>1</sup> The CO<sub>2</sub> equivalent for a gas is derived by multiplying the mass of the gas by the associated GWP, such that metric tons of CO<sub>2</sub>E = (metric tons of a GHG) × (GWP of the GHG). For example, the GWP for CH<sub>4</sub> is 21. This means that emissions of one metric ton of CH<sub>4</sub> are equivalent to emissions of 21 metric tons of CO<sub>2</sub>.

The City of Riverside (City) Community Greenhouse Gas Emissions Inventory (City of Riverside 2010) preliminary study evaluated the current level of GHG emissions from the community within the City's geographic boundary (Community) and utilized International Council for Local Environmental Initiatives (ICLEI)'s Clean Air and Climate Protection Software and emission accounting protocols for assessing emissions from the following sectors: built environment (residential, commercial, industrial), mobile emissions (on-road transportation, airport, rail), and solid waste.

From 1990 to 2000, overall GHG emissions produced by the Community within the City increased by 20.4 percent. A critical factor in this rise is the continued growth and development within the City. For comparison, GHG emissions nationwide increased by about 15 percent between 1990 and 2000, according to the U.S. Environmental Protection Agency (EPA) (City of Riverside 2010). Similar growth and development occurred in the City between 2000 and 2007, and growth was projected going forward to 2012 under a business-as-usual (BAU) scenario (i.e., no reduction in emissions due to GHG reduction measures). As shown in Table 4.4-2, Community GHG Emissions, the City's emissions were projected to increase in 2012 by 17.8 percent from 2007. Based on a population of 296,842 residents, the per capita CO<sub>2</sub>E emissions were 9.45 metric tons (MT) per resident per year in 2007. The Community's estimated GHG emissions from City operations in the 2007 (baseline) and projected emissions under a 5-year BAU scenario in 2012 are presented in Table 4.4-2.

**Table 4.4-2**  
**Community GHG Emissions**

	2007		Projected 2012 Business as Usual	
<i>Sector</i>	<i>MT CO<sub>2</sub>E</i>	<i>% of Total</i>	<i>MT CO<sub>2</sub>E</i>	<i>% of Total</i>
<i>Built Environment Energy Use – Electricity</i>				
Residential	357,306	12.7%	405,185	12.3%
Commercial/Industrial	669,297	23.9%	773,772	23.4%
<i>Build Environment Energy Use – Natural Gas</i>				
Residential	204,976	7.3%	200,261	6.1%
Commercial/Industrial	187,152	6.7%	237,028	7.2%
<i>Mobile Emissions</i>				
On-road transportation	1,139,674	40.6%	1,379,744	40.8%
Airport	1,540	0.1%	2,728	0.1%
Rail	27,524	1.0%	51,245	1.6%
Solid waste	218,432	7.8%	254,610	7.7%
<b>Total</b>	<b>2,805,901</b>	<b>100.0%</b>	<b>3,304,673</b>	<b>100%</b>

Source: City of Riverside 2010.

### **Potential Effects of Human Activity on Climate Change**

According to CARB, some of the potential impacts in California of global warming may include loss of snow pack, sea level rise, more extreme heat days per year, more high O<sub>3</sub> days, more large forest fires, and more drought years (CARB 2006). Several recent studies have attempted to explore the possible negative consequences that climate change, left unchecked, could have in California. These reports acknowledge that climate scientists' understanding of the complex global climate system and the interplay of the various internal and external factors that affect climate change, remains too limited to yield scientifically valid conclusions on such a localized scale. Substantial work has been done at the international and national level to evaluate climatic impacts, but far less information is available on regional and local impacts.

The primary effect of global climate change has been a rise in average global tropospheric temperature of 0.2°C per decade, determined from meteorological measurements worldwide between 1990 and 2005. Climate change modeling using emission rates from the year 2000 shows that further warming would occur, which would induce further changes in the global climate system during the current century. Changes to the global climate system and ecosystems and to California would include, but would not be limited to, the following:

- The loss of sea ice and mountain snowpack resulting in higher sea levels and higher sea surface evaporation rates with a corresponding increase in tropospheric water vapor due to the atmosphere's ability to hold more water vapor at higher temperatures (IPCC 2007).
- A rise in global average sea level primarily due to thermal expansion and melting of glaciers and ice caps and the Greenland and Antarctic ice sheets (IPCC 2007).
- Changes in weather that include widespread changes in precipitation, ocean salinity, and wind patterns and more energetic aspects of extreme weather, including droughts, heavy precipitation, heat waves, extreme cold, and increased intensity of tropical cyclones (IPCC 2007).
- A decline of Sierra snowpack, which accounts for approximately half of the surface water storage in California, by 70 percent to as much as 90 percent over the next 100 years (CAT 2006).
- An increase in the number of days conducive to O<sub>3</sub> formation by 25 to 85 percent (depending on the future temperature scenario) in high O<sub>3</sub> areas of Los Angeles and the San Joaquin Valley by the end of the 21<sup>st</sup> century (CAT 2006).
- A high potential for erosion of California's coastlines and seawater intrusion into the Delta and levee systems due to the rise in sea level (CAT 2006).

## Related Regulations

Regulation of GHGs in the United States and California is relatively recent, beginning early in the 2000s. In the absence of major Federal efforts, California's former governor, Arnold Schwarzenegger, and the legislature took initiatives to establish goals for reductions of GHG emissions in California and to prescribe a regulatory approach to ensuring that the goals would be met. The Federal Government, primarily through actions of the EPA, has also begun to regulate GHG emissions, although not as comprehensively. This section provides a brief foundation for these regulatory efforts and discusses the key Federal and State regulatory efforts that could apply to development under the proposed project and the users of such development.

### *Federal*

***Massachusetts v. EPA.*** On April 2, 2007, in *Massachusetts v. EPA*, the U.S. Supreme Court directed the EPA administrator to determine whether GHG emissions from new motor vehicles cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. In making these decisions, the EPA administrator is required to follow the language of Section 202(a) of the Clean Air Act (CAA). On December 7, 2009, the administrator signed a final rule with two distinct findings regarding GHGs under Section 202(a) of the CAA:

- The administrator found that elevated concentrations of GHGs—CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, PFCs, and SF<sub>6</sub>—in the atmosphere threaten the public health and welfare of current and future generations. This is referred to as the “endangerment finding.”
- The administrator further found the combined emissions of GHGs—CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, and HFCs—from new motor vehicles and new motor vehicle engines contribute to the GHG air pollution that endangers public health and welfare. This is referred to as the “cause or contribute finding.”

These two findings were necessary to establish the foundation for regulation of GHGs from new motor vehicles as air pollutants under the CAA.

***Energy Independence and Security Act.*** On December 19, 2007, President George W. Bush signed the Energy Independence and Security Act of 2007. Among other key measures, the act would do the following, which would aid in the reduction of national GHG emissions:

1. Increase the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard (RFS) requiring fuel producers to use at least 36 billion gallons of biofuel in 2022.
2. Set a target of 35 miles per gallon (mpg) for the combined fleet of cars and light trucks by model year 2020 and direct National Highway Traffic Safety Administration (NHTSA) to

establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for work trucks.

3. Prescribe or revise standards affecting regional efficiency for heating and cooling products and procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances.

***EPA and NHTSA Joint Final Rule for Vehicle Standards.*** On April 1, 2010, the EPA and NHTSA announced a joint final rule to establish a national program consisting of new standards for light-duty vehicles model years 2012 through 2016. The joint rule is intended to reduce GHG emissions and improve fuel economy. The EPA is finalizing the first-ever national GHG emissions standards under the CAA, and NHTSA is finalizing Corporate Average Fuel Economy (CAFE) standards under the Energy Policy and Conservation Act (EPA and NHTSA 2010). This final rule follows the EPA and Department of Transportation's joint proposal on September 15, 2009, and is the result of President Obama's May 2009 announcement of a national program to reduce GHGs and improve fuel economy (EPA 2011). The final rule became effective on July 6, 2010 (EPA and NHTSA 2010).

The EPA GHG standards require new passenger cars, light-duty trucks, and medium-duty passenger vehicles to meet an estimated combined average emissions level of 250 grams of CO<sub>2</sub> per mile in model year 2016, equivalent to 35.5 mpg if the automotive industry were to meet this CO<sub>2</sub> level through fuel economy improvements alone. The CAFE standards for passenger cars and light trucks will be phased in between 2012 and 2016, with the final standards equivalent to 37.8 mpg for passenger cars and 28.8 mpg for light trucks, resulting in an estimated combined average of 34.1 mpg. Together, these standards will cut GHG emissions by an estimated 960 MMT and save 1.8 billion barrels of oil over the lifetime of the vehicles sold under the program. The rules will simultaneously reduce GHG emissions, improve energy security, increase fuel savings, and provide clarity and predictability for manufacturers (EPA 2011).

In August 2012, the EPA and NHTSA approved a second round of GHG and CAFE standards for model years 2017 and beyond (EPA and NHTSA 2012). These standards will reduce motor vehicle GHG emissions to 163 grams of CO<sub>2</sub> per mile, which is equivalent to 54.4 mpg if this level were achieved solely through improvements in fuel efficiency, for cars and light-duty trucks by model year 2025. A portion of these improvements, however, will likely be made through reductions in air conditioning leakage and through use of alternative refrigerants, which would not contribute to fuel economy. The first phase of the CAFE standards (for model year 2017 to 2021) is projected to require, on an average industry fleet-wide basis, a range from 40.3 to 41.0 mpg in model year 2021. The second phase of the CAFE program (for model years 2022 to 2025) is projected to require, on an average industry fleet-wide basis, a range from 48.7 to 49.7 mpg in model year 2025. The second phase of standards has not been finalized due to the

statutory requirement that the NHTSA set average fuel economy standards not more than five model years at a time. The regulations also include targeted incentives to encourage early adoption and introduction into the marketplace of advanced technologies to dramatically improve vehicle performance, including the following:

- Incentives for electric vehicles, plug-in hybrid electric vehicles, and fuel-cell vehicles.
- Incentives for hybrid technologies for large pickup trucks and for other technologies that achieve high fuel economy levels on large pickup trucks.
- Incentives for natural gas vehicles.
- Credits for technologies with potential to achieve real-world GHG reductions and fuel economy improvements that are not captured by the standard test procedures.

#### *State*

**Title 24.** Although not originally intended to reduce GHG emissions, California's Energy Efficiency Standards for Residential and Nonresidential Buildings (24 CCR 6) were first established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy-efficiency technologies and methods. The premise for the standards is that energy-efficient buildings require less electricity, natural gas, and other fuels. Electricity production from fossil fuels and on-site fuel combustion (typically for space and water heating) results in GHG emissions. Therefore, increased energy efficiency in buildings results in relatively lower rates of GHG emissions on a building-by-building basis.

**Assembly Bill 1493.** In response to the transportation sector accounting for more than half of California's CO<sub>2</sub> emissions, Assembly Bill (AB) 1493 (Pavley) was enacted on July 22, 2002. AB 1493 required CARB to set GHG emission standards for passenger vehicles, light-duty trucks, and other vehicles determined by the State Board to be vehicles whose primary use is noncommercial personal transportation in the State. The bill required that CARB set GHG emission standards for motor vehicles manufactured in 2009 and all subsequent model years. CARB adopted the standards in September 2004. When fully phased in, the near-term (2009–2012) standards will result in a reduction of about 22 percent in GHG emissions compared to the emissions from the 2002 fleet, while the mid-term (2013–2016) standards will result in a reduction of about 30 percent.

Before these regulations could go into effect, the EPA had to grant California a waiver under the CAA, which ordinarily preempts state regulation of motor vehicle emission standards. The waiver was granted by Lisa Jackson, the EPA administrator, on June 30, 2009. On March 29, 2010, the CARB executive officer approved revisions to the motor vehicle GHG standards to harmonize the state program with the national program for 2012–2016 model years (see EPA and

NHTSA Joint Final Rule for Vehicle Standards). The revised regulations became effective April 1, 2010.

***Executive Order S-3-05.*** In June 2005, Governor Schwarzenegger established California's GHG emissions reduction targets in Executive Order S-3-05. The executive order established the following goals: GHG emissions should be reduced to 2000 levels by 2010, GHG emissions should be reduced to 1990 levels by 2020, and GHG emissions should be reduced to 80 percent below 1990 levels by 2050. The California Environmental Protection Agency secretary is required to coordinate efforts of various agencies to collectively and efficiently reduce GHGs. The Climate Action Team (CAT) is responsible for implementing global warming emissions reduction programs. Representatives from several state agencies compose the CAT. Under the executive order, the California Environmental Protection Agency secretary is directed to report biannually on progress made toward meeting the GHG targets and the impacts to California due to global warming, including impacts to water supply, public health, agriculture, the coastline, and forestry. The CAT fulfilled its initial report requirements through the 2006 *Climate Action Team Report to Governor Schwarzenegger and the Legislature* (CAT 2006).

The 2009 *Climate Action Team Biennial Report* (CAT 2010a), published in April 2010, expands on the policy outlined in the 2006 assessment. The 2009 report provides new information and scientific findings regarding the development of new climate and sea level projections using new information and tools that have recently become available and evaluates climate change within the context of broader social changes, such as land use changes and demographics. The 2009 report also identifies the need for additional research in several different aspects that affect climate change in order to support effective climate change strategies. The aspects of climate change determined to require future research include vehicle and fuel technologies, land use and smart growth, electricity and natural gas, energy efficiency, renewable energy and reduced carbon energy sources, low GHG technologies for other sectors, carbon sequestration, terrestrial sequestration, geologic sequestration, economic impacts and considerations, social science, and environmental justice.

Subsequently, the 2010 *Climate Action Team Report to Governor Schwarzenegger and the California Legislature* (CAT 2010b) reviews past Climate Action Milestones including voluntary reporting programs, GHG standards for passenger vehicles, the Low Carbon Fuel Standard (LCFS), a statewide renewable energy standard, and the cap-and-trade program. Additionally, the 2010 report includes a cataloguing of recent research and ongoing projects; mitigation and adaptation strategies identified by sector (e.g., agriculture, biodiversity, electricity, and natural gas); actions that can be taken at the regional, national, and international levels to mitigate the adverse effects of climate change; and today's outlook on future conditions. The 2010 report also focuses on case studies involving collaborative efforts among multiple agencies on research projects related to climate change and policy development.

**Assembly Bill 32.** In furtherance of the goals established in Executive Order S-3-05, the legislature enacted AB 32 (Núñez and Pavley), the California Global Warming Solutions Act of 2006, which Governor Schwarzenegger signed on September 27, 2006. The GHG emissions limit is equivalent to the 1990 levels, which are to be achieved by 2020.

CARB has been assigned to carry out and develop the programs and requirements necessary to achieve the goals of AB 32. Under AB 32, CARB must adopt regulations requiring the reporting and verification of statewide GHG emissions. This program will be used to monitor and enforce compliance with the established standards. CARB is also required to adopt rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emission reductions. AB 32 allows CARB to adopt market-based compliance mechanisms to meet the specified requirements. Finally, CARB is ultimately responsible for monitoring compliance and enforcing any rule, regulation, order, emission limitation, emission reduction measure, or market-based compliance mechanism adopted.

The first action under AB 32 resulted in the adoption of a report listing early-action GHG emission reduction measures on June 21, 2007. The early actions include three specific GHG control rules. On October 25, 2007, CARB approved an additional six early-action GHG reduction measures under AB 32. The three original early-action regulations meeting the narrow legal definition of “discrete early action GHG reduction measures” consist of the following:

1. A low-carbon fuel standard to reduce the “carbon intensity” of California fuels.
2. Reduction of refrigerant losses from motor vehicle air conditioning system maintenance to restrict the sale of “do-it-yourself” automotive refrigerants.
3. Increased methane capture from landfills to require broader use of state-of-the-art methane capture technologies.

The additional six early-action regulations, which were also considered “discrete early action GHG reduction measures,” consist of the following:

1. Reduction of aerodynamic drag, and thereby fuel consumption, from existing trucks and trailers through retrofit technology.
2. Reduction of auxiliary engine emissions of docked ships by requiring port electrification.
3. Reduction of PFC emissions from the semiconductor industry.
4. Reduction of propellants in consumer products (e.g., aerosols, tire inflators, and dust removal products).
5. Requirements that all tune-up, smog check and oil change mechanics ensure proper tire inflation as part of overall service in order to maintain fuel efficiency.

6. Restriction on the use of SF<sub>6</sub> from non-electricity sectors if viable alternatives are available.

As required under AB 32, on December 6, 2007, CARB approved the 1990 GHG emissions inventory, thereby establishing the emissions limit for 2020. The 2020 emissions limit was set at 427 MMT CO<sub>2</sub>E. In addition to the 1990 emissions inventory, CARB also adopted regulations requiring mandatory reporting of GHGs for the large facilities that account for 94 percent of GHG emissions from industrial and commercial stationary sources in California. About 800 separate sources fall under the new reporting rules and include electricity generating facilities, electricity retail providers and power marketers, oil refineries, hydrogen plants, cement plants, cogeneration facilities, and other industrial sources that emit CO<sub>2</sub> in excess of specified thresholds.

On December 11, 2008, CARB approved the *Climate Change Proposed Scoping Plan: A Framework for Change* (Scoping Plan; CARB 2008) to achieve the goals of AB 32. The Scoping Plan establishes an overall framework for the measures that will be adopted to reduce California's GHG emissions. The Scoping Plan evaluates opportunities for sector-specific reductions, integrates all CARB and CAT early actions and additional GHG reduction measures by both entities, identifies additional measures to be pursued as regulations, and outlines the role of a cap-and-trade program.

The key elements of the Scoping Plan include the following:

- Expanding and strengthening existing energy efficiency programs as well as building and appliance standards.
- Achieving a statewide renewables energy mix of 33 percent.
- Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system and caps sources contributing 85 percent of California's GHG emissions.
- Establishing targets for transportation-related GHG emissions for regions throughout California, and pursuing policies and incentives to achieve those targets.
- Adopting and implementing measures pursuant to existing State laws and policies, including California's clean car standards, goods movement measures, and the LCFS.

Creating targeted fees, including a public goods charge on water use, fees on high GWP gases, and a fee to fund the administrative costs of the State of California's long-term commitment to AB 32 implementation.

**Senate Bill 1368.** In September 2006, Governor Schwarzenegger signed Senate Bill (SB) 1368, which requires the California Energy Commission (CEC) to develop and adopt regulations for

GHG emissions performance standards for the long-term procurement of electricity by local publicly owned utilities. These standards must be consistent with the standards adopted by the California Public Utilities Commission (CPUC). This effort will help protect energy customers from financial risks associated with investments in carbon-intensive generation by allowing new capital investments in power plants whose GHG emissions are as low as or lower than new combined-cycle natural gas plants by requiring imported electricity to meet GHG performance standards in California and by requiring that the standards be developed and adopted in a public process.

***Executive Order S-1-07.*** Issued on January 18, 2007, Executive Order S-1-07 sets a declining LCFS for GHG emissions measured in CO<sub>2</sub>E grams per unit of fuel energy sold in California. The target of the LCFS is to reduce the carbon intensity of California passenger vehicle fuels by at least 10 percent by 2020. The carbon intensity measures the amount of GHG emissions in the lifecycle of a fuel, including extraction/feedstock production, processing, transportation, and final consumption, per unit of energy delivered. CARB adopted the implementing regulation in April 2009. The regulation is expected to increase the production of biofuels, including those from alternative sources, such as algae, wood, and agricultural waste. In addition, the LCFS would drive the availability of plug-in hybrid, battery electric, and fuel-cell power motor vehicles. The LCFS is anticipated to lead to the replacement of 20 percent of the fuel used in motor vehicles with alternative fuels by 2020.

***Senate Bill 375.*** In August 2008, the legislature passed, and on September 30, 2008, Governor Schwarzenegger signed SB 375 (Steinberg), which addresses GHG emissions associated with the transportation sector through regional transportation and sustainability plans. Regional GHG reduction targets for the automobile and light-truck sector for 2020 and 2035, as determined by CARB, are required to consider the emission reductions associated with vehicle emission standards (see Senate Bill 1493), the composition of fuels (see Executive Order S-1-07), and other CARB-approved measures to reduce GHG emissions. Regional metropolitan planning organizations will be responsible for preparing a Sustainable Communities Strategy (SCS) within their Regional Transportation Plan (RTP). The goal of the SCS is to establish a development plan for the region, which, after considering transportation measures and policies, will achieve, if feasible, the GHG reduction targets. If an SCS is unable to achieve the GHG reduction target, a metropolitan planning organization must prepare an alternative planning strategy demonstrating how the GHG reduction target would be achieved through alternative development patterns, infrastructure, or additional transportation measures or policies. SB 375 provides incentives for streamlining California Environmental Quality Act (CEQA) requirements by substantially reducing the requirements for “transit priority projects,” as specified in SB 375, and eliminating the analysis of the impacts of certain residential projects on global warming and the growth-inducing impacts of those projects when the projects are consistent with the SCS or alternative planning strategy. On September 23, 2010, CARB adopted the SB 375 targets for the regional

metropolitan planning organizations. The targets for the Southern California Association of Governments (SCAG) are an eight percent reduction in emissions per capita by 2020 and a 13 percent reduction by 2035. SCAG prepared its RTP/SCS, which was adopted by the SCAG Regional Council on April 4, 2012. The plan quantified a nine percent reduction by 2020 and a 16 percent reduction by 2035. On June 4, 2012, the CARB executive officer issued an executive order accepting SCAG's quantification of GHG reductions and the determination that the SCS would achieve the GHG emission reduction targets established by CARB.

***Executive Order S-13-08.*** Governor Schwarzenegger issued Executive Order S-13-08 on November 14, 2008. The executive order is intended to hasten California's response to the impacts of global climate change, particularly sea level rise. It directs State agencies to take specified actions to assess and plan for such impacts. It directs the California Natural Resources Agency (CNRA), in cooperation with the California Department of Water Resources, CEC, California's coastal management agencies, and the Ocean Protection Council, request that the National Academy of Sciences prepare a Sea Level Rise Assessment Report by December 1, 2010. The Ocean Protection Council, California Department of Water Resources, and CEC, in cooperation with other State agencies are required to conduct a public workshop to gather information relevant to the Sea Level Rise Assessment Report. The Business, Transportation, and Housing Agency was ordered to assess within 90 days of the order the vulnerability of the State's transportation systems to sea level rise. The Governor's Office of Planning and Research (OPR) and the CNRA are required to provide land use planning guidance related to sea level rise and other climate change impacts. The order also requires the other State agencies to develop adaptation strategies by June 9, 2009, to respond to the impacts of global climate change that are predicted to occur over the next 50 to 100 years. A discussion draft adaptation strategies report was released in August 2009, and the final adaption strategies report was issued in December 2009. To assess the State's vulnerability, the report summarizes key climate change impacts to the State for the following areas: public health, ocean and coastal resources, water supply and flood protection, agriculture, forestry, biodiversity and habitat, and transportation and energy infrastructure. The report then recommends strategies and specific responsibilities related to water supply, planning and land use, public health, fire protection, and energy conservation.

***Senate Bill XI 2.*** On April 12, 2011, Governor Jerry Brown signed SB XI 2 in the First Extraordinary Session, which would expand the Renewable Portfolio Standard (RPS) by establishing a goal of 20 percent of the total electricity sold to retail customers in California per year by December 31, 2013, and 33 percent by December 31, 2020, and in subsequent years. Under the bill, a renewable electrical generation facility is one that uses biomass, solar thermal, photovoltaic, wind, geothermal, fuel cells using renewable fuels, small hydroelectric generation of 30 megawatts or less, digester gas, municipal solid waste conversion, landfill gas, ocean wave, ocean thermal, or tidal current and that meets other specified requirements with respect to its location. In addition to the retail sellers covered by SB 107, SB XI 2 adds local publicly owned

electric utilities to the RPS. By January 1, 2012, the CPUC is required to establish the quantity of electricity products from eligible renewable energy resources to be procured by retail sellers in order to achieve targets of 20 percent by December 31, 2013; 25 percent by December 31, 2016; and 33 percent by December 31, 2020. The statute also requires that the governing boards for local publicly owned electric utilities establish the same targets and that the governing boards be responsible for ensuring compliance with these targets. The CPUC will be responsible for enforcement of the RPS for retail sellers, while the CEC and CARB will enforce the requirements for local publicly owned electric utilities.

### ***Local***

***City of Riverside Green Action Plan.*** In July 2005, the City of Riverside assembled a Clean and Green Task Force that developed guidelines for a cleaner, greener, and more sustainable city. Its sustainability policy statement highlighted the following categories: save water, keep it clean, make it solar, make it shady, clean the air, save fuel, make it smart, and build green. The task force created a 38-point Clean and Green Sustainable Riverside Action Plan (Green Action Plan) to transform the policy statement into an implementation plan. The Green Action Plan is an evolving document that outlines ways to improve air quality, reduce traffic congestion, increase accessibility and use of parks, and otherwise preserve the environment (Green Riverside 2012). The first Riverside Green Action Plan was approved by the City Council in December 2007. To ensure that the tasks of the Green Action Plan would be carried out successfully, the City formed a Green Accountability Performance Committee, and within just two years, nearly all of the plan's 38 tasks had been accomplished. In February 2009, the California Department of Conservation introduced Riverside as California's First Emerald City, and in September 2009, the City introduced a Green Action Plan–Emerald City update. The latest Green Action Plan (2012) includes 19 goals and more than 50 tasks within the following eight areas: energy, GHG emissions, waste, urban design, urban nature, transportation, water, and healthy communities.

There are two goals under the Green Action Plan GHG emissions focus area: Goal 4 and Goal 5. One action under Goal 4 is to establish the 1990 GHG emissions baseline for the City by the end of 2010 and every five years after. Goal 5 aims to create a climate action plan to reduce GHG emissions to seven percent below the 1990 City baseline, utilizing the City boundaries as defined in 2008. In 2010, the City established the 1990 emissions baseline (City of Riverside 2010). The remaining actions under Goal 4 (to develop and incorporate mitigation measures in the Green Action Plan that provide verifiable GHG savings by 2010 and work with the Western Riverside Council of Government's Climate Action Plan team to update the inventories in compliance with the audit leveraging off the Western Riverside Council of Governmental Regional Climate Action Plan Grant) have not been completed. While Goal 5 has not been fully completed, the City released its Administrative Draft Climate Action Plan in October 2014.

### 4.4.2 Thresholds of Significance

#### OPR Guidance

The OPR's Technical Advisory titled *CEQA and Climate Change: Addressing Climate Change through California Environmental Quality Act (CEQA) Review* states that “public agencies are encouraged but not required to adopt thresholds of significance for environmental impacts. Even in the absence of clearly defined thresholds for GHG emissions, the law requires that such emissions from CEQA projects must be disclosed and mitigated to the extent feasible whenever the lead agency determines that the project contributes to a significant, cumulative climate change impact” (OPR 2008). Furthermore, the advisory document indicates that “in the absence of regulatory standards for GHG emissions or other scientific data to clearly define what constitutes a ‘significant impact,’ individual lead agencies may undertake a project-by-project analysis, consistent with available guidance and current CEQA practice” (OPR 2008).

#### Cumulative Nature of Climate Change

Global climate change is a cumulative impact; a project participates in this potential impact through its incremental contribution combined with the cumulative increase of all other sources of GHGs. There are currently no established thresholds for assessing whether the GHG emissions of a project in the South Coast Air Basin, such as the proposed project, would be considered a cumulatively considerable contribution to global climate change; however, all reasonable efforts should be made to minimize a project's contribution to global climate change.

While the proposed project would result in emissions of GHGs during implementation, no guidance exists to indicate what level of GHG emissions would be considered substantial enough to result in a significant adverse impact on global climate. However, it is generally believed that an individual project is of insufficient magnitude by itself to influence climate change or result in a substantial contribution to the global GHG inventory as scientific uncertainty regarding the significance a project's individual and cumulative effects on global climate change remains. Accordingly, this analysis concludes that the project will not result in any potentially significant direct impacts on global climate change, and the remainder of this analysis focuses on the proposed project's potential cumulative contributions to global climate change resulting from its GHG emissions.

Thus, GHG impacts are recognized as exclusively cumulative impacts; there are no non-cumulative GHG emission impacts from a climate change perspective (CAPCOA 2008). This approach is consistent with that recommended by the CNRA, which noted in its Public Notice for the proposed CEQA amendments that the evidence before it indicates that in most cases, the impact of GHG emissions should be considered in the context of a cumulative impact, rather than a project-level impact (CNRA 2009a). Similarly, the Final Statement of Reasons for

Regulatory Action on the CEQA Amendments confirm that an EIR or other environmental document must analyze the incremental contribution of a project to GHG levels and determine whether those emissions are cumulatively considerable (CNRA 2009b). Accordingly, further discussion of the project's GHG emissions and their impact on global climate are addressed below.

### **CEQA Guidelines**

The CNRA adopted amendments to the CEQA Guidelines on December 30, 2009, which became effective on March 18, 2010. With respect to GHG emissions, the amended CEQA Guidelines state in Section 15064.4(a) that lead agencies should “make a good faith effort, to the extent possible on scientific and factual data, to describe, calculate or estimate” GHG emissions. The CEQA Guidelines note that an agency may identify emissions by either selecting a “model or methodology” to quantify the emissions or by relying on “qualitative analysis or other performance based standards” (14 CCR 15000 et seq.). Section 15064.4(b) provides that the lead agency should consider the following when assessing the significance of impacts from GHG emissions on the environment:

- The extent a project may increase or reduce GHG emissions as compared to the existing environmental setting.
- Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
- The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (Section 15064.4(b)).

In addition, Section 15064.7(c) specifies that “[w]hen adopting thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence” (Section 15064.7(c)). Similarly, the revisions to Appendix G, *Environmental Checklist Form*, which is often used as a basis for lead agencies' selection of significance thresholds, do not prescribe specific thresholds. Rather, the CEQA Guidelines establish two new CEQA thresholds related to GHGs, and these will therefore be used to discuss significance of project impacts:

- Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?
- Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Accordingly, the CEQA Guidelines do not prescribe specific methodologies for performing an assessment, do not establish specific thresholds of significance, and do not mandate specific mitigation measures. Rather, the CEQA Guidelines emphasize the lead agency's discretion to determine the appropriate methodologies and thresholds of significance consistent with the manner in which other impact areas are handled in CEQA (CNRA 2009c).

#### **Status of Proposed SCAQMD Thresholds**

The South Coast Air Quality Management District (SCAQMD) has not adopted recommended numeric CEQA significance thresholds for GHG emissions for lead agencies to use in assessing GHG impacts of residential and commercial development projects. The SCAQMD plans to provide guidance to local lead agencies on determining GHG significance thresholds in their CEQA documents by forming a GHG CEQA Significance Threshold Working Group to work with SCAQMD staff on developing GHG CEQA significance thresholds until statewide significance thresholds or guidelines are established. The SCAQMD proposed three tiers of compliance that may lead to a determination that impacts are less than significant, including the following:

1. Projects with GHGs within budgets set out in approved regional plans to be developed under the SB 375 process.
2. Projects with GHG emissions that are below designated quantitative thresholds:
  - a. Industrial projects with an incremental GHG emissions increase that falls below (or is mitigated to be less than) 10,000 MT CO<sub>2</sub>E per year.
  - b. Commercial and residential projects with an incremental GHG emissions increase that falls below (or is mitigated to be less than) 3,000 MT CO<sub>2</sub>E per year, provided that such projects also meet energy efficiency and water conservation performance targets that have yet to be developed.
3. Projects that purchase GHG offsets that, either alone or in combination with one of the three tiers mentioned above, achieve the target significance screening level.

From December 2008 to September 2010, the SCAQMD hosted working group meetings and revised the draft threshold proposal several times, although it did not officially provide these proposals in a subsequent document. The most recent working group meeting on September 28, 2010 (SCAQMD 2010), proposed two options lead agencies can select from to screen thresholds of significance for GHG emissions in residential and commercial projects, and proposes to expand the industrial threshold to other lead agency industrial projects. Option 1 proposes a threshold of 3,000 MT CO<sub>2</sub>E per year for all residential and commercial projects and Option 2 proposes a threshold value by land use type where the numeric threshold is 3,500 MT CO<sub>2</sub>E per year for residential projects, 1,400 MT CO<sub>2</sub>E per year for commercial projects, and 3,000 MT

CO<sub>2</sub>E per year for mixed-use projects (SCAQMD 2010). Although both options are recommended, a lead agency is advised to use only one option and to use it consistently. The approach used in this analysis is to disclose the most recent regulatory activity. Although the proposed project does not fall into a specific land use category mentioned above, the City has determined that the project's GHG emissions will be compared to Option 1 of the SCAQMD recommendations of a threshold of 3,000 MT CO<sub>2</sub>E per year for all residential and commercial projects.

This report will use the SCAQMD's draft efficiency metric of 4.8 MT/SP/YR to make its significance determinations. As this project includes only demolition, the service population would be the average number of workers per day. Finally, since no threshold of significance has been adopted for demolition GHG emissions, consistent with methods used by the SCAQMD in their draft guidelines, the one-time demolition and vegetation change annual GHG emissions are amortized over a 30-year average project lifespan and compared to the SCAQMD's draft efficiency metric.

#### **4.4.3 Project Elements That Can Reduce Impacts**

No project design features have been proposed as a means to reduce impacts related to GHG emissions.

#### **4.4.4 Environmental Impacts Before Mitigation**

***Threshold: Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?***

The proposed project consists of the demolition of three existing on-site buildings. Demolition activities would be the primary source of GHG emissions during the project. GHGs would be emitted through the operation of construction equipment and from worker and vendor vehicles, each of which typically uses fossil-based fuels to operate. The combustion of fossil-based fuels creates GHGs such as CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O. Furthermore, CH<sub>4</sub> is emitted during the fueling of heavy equipment.

Construction activities produce combustion emissions from various sources, such as demolition, utility engines, on-site heavy-duty construction vehicles, equipment hauling materials to and from the site, and motor vehicles transporting the construction crew. Exhaust emissions from on-site construction activities would vary daily as construction activity levels change.

GHG emissions generated by the proposed project would predominantly consist of CO<sub>2</sub>. In comparison to criteria air pollutants such as O<sub>3</sub> and PM<sub>10</sub>, CO<sub>2</sub> emissions persist in the atmosphere for a substantially longer period of time. While emissions of other GHGs, such as

CH<sub>4</sub>, are important with respect to Global Climate Change (GCC), emission levels of other GHGs are less dependent on the land use and circulation patterns associated with the proposed land use development project than are levels of CO<sub>2</sub>.

The California Emissions Estimator Model (CalEEMod) was used to calculate the annual GHG emissions based on the demolition scenario described in Section 4.2, Air Quality. Table 4.4-3, Project GHG Emissions, presents estimates for GHG emissions by phase for the project. Note that the Rough Grading phase includes vegetation removal and site clearing.

**Table 4.4-3  
Project GHG Emissions**

Construction Phase	MT CO <sub>2</sub>	MT CH <sub>4</sub>	MT N <sub>2</sub> O	MT CO <sub>2</sub> E
Demolition	87	0.022	0.00	88
Rough Grading	12	0.0034	0.00	12
Total	99	0.0254	0.00	100

Source: LSA Associates, Inc., December 2014.

MT = metric tons; CO<sub>2</sub> = carbon dioxide; CH<sub>4</sub> = methane; N<sub>2</sub>O = nitrous oxide; CO<sub>2</sub>E = carbon dioxide equivalent

As shown in Table 4.4-3, total project GHG emissions would be approximately 100 MT CO<sub>2</sub>E. The traffic study determined that there would be six workers daily. The GHG emissions rate of 100 amortized over 30 years divided by the service population of six results in 0.56 MT/SP/yr, less than the threshold of 4.8 MT/SP/yr. While the project's contribution to cumulative GHG emissions would be considered less than significant, Mitigation Measure (MM) GHG-1 is recommended to further reduce GHG emissions.

#### ***Operational Impacts***

The proposed project is limited to the demolition of three existing structures on site. The project has no long-term or operational component. Future use of the site and related GHG emissions were addressed by the CBUSP MND, which found that the future build out of the Specific Plan, including the project site, will have a less than significant impact. Therefore, since there are no operational emissions, the proposed project has **no impact** regarding operational emissions of GHGs. No mitigation is required.

***Threshold: Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?***

As discussed in Section 4.4.1, the Scoping Plan approved by CARB on December 12, 2008, provides a framework for actions to reduce California's GHG emissions and requires CARB and other State agencies to adopt regulations and other initiatives to reduce GHGs. As such, the

Scoping Plan is not directly applicable to specific projects. Moreover, the Final Statement of Reasons for the amendments to the CEQA Guidelines reiterates the statement in the Initial Statement of Reasons that “[t]he Scoping Plan may not be appropriate for use in determining the significance of individual projects ... because it is conceptual at this stage and relies on the future development of regulations to implement the strategies identified in the Scoping Plan” (CNRA 2009b). Under the Scoping Plan, however, there are several State regulatory measures aimed at the identification and reduction of GHG emissions. CARB and other State agencies have adopted many of the measures identified in the Scoping Plan. Most of these measures focus on area source emissions (e.g., energy usage, high-GWP GHGs in consumer products) and changes to the vehicle fleet (hybrid, electric, and more fuel-efficient vehicles) and associated fuels (e.g., LCFS), among others. While State regulatory measures will ultimately reduce GHG emissions associated with the project through their effect on these sources, no statewide plan, policy, or regulation would be specifically applicable to reductions in GHG emissions from the proposed project.

The City of Riverside has not adopted a GHG reduction plan, as specified in California Code of Regulations, Title 14, Section 15183.5(b), that would apply to the GHG emissions associated with the proposed project. Although the City’s Clean and Green Sustainable Riverside Action Plan is not a plan adopted for the purpose of reducing GHG emissions, the latest Green Action Plan (2012) includes goals to address citywide GHG emissions. Many of the goals will require actions by the City (e.g., adoption of appropriate regulations or ordinances or installation of photovoltaic solar facilities). Goals under the GHG emissions focus area include establishing the GHG emissions baseline for the City of Riverside (Goal 4) and creating a climate action plan to reduce GHG emissions to seven percent below the 1990 City baseline, utilizing the City boundaries as defined in 2008 (Goal 5). These goals have not been completed to date, and the tasks under these goals that involve identifying mitigation measures to meet the GHG reduction goal have also not been accomplished at this time. As there are no completed Green Action Plan goals or tasks or an adopted climate action plan that would apply to the proposed project, no conflict would occur. Nonetheless, the proposed project would be consistent with several of the goals and actions included in the Green Action Plan, as summarized in Table 4.4-4, Consistency with Green Action Plan Goals.

**Table 4.4-4**  
**Consistency with Green Action Plan Goals**

Green Action Plan Goal/Action	Proposed Project Feature
Develop measures to encourage that a minimum of 90% of recoverable waste from all construction sites be recycled throughout Riverside by 2015, beginning with 40% in 2010 and increasing by 10% each year thereafter.	GHG-1: Divert at least 50 percent of the demolished and/or grubbed construction materials (including, but not limited to, soil, vegetation, concrete, lumber, metal, and cardboard).

**Table 4.4-4**  
**Consistency with Green Action Plan Goals**

Green Action Plan Goal/Action	Proposed Project Feature
Enforce the 2010 California Green Code provisions concerning construction and demolition waste reduction, disposal and recycling.	The project shall be compliant with the 2010 California Green Code provisions regarding construction and demolition waste.

Source: City of Riverside 2012.

At this time, no mandatory State or local plans, policies, or regulations intended to reduce GHG emissions would apply to implementation of this project, and no conflict with an applicable plan would occur. The project does not include the creation of a new long-term source of GHG emissions. Impacts relating to the project’s potential conflicts with an applicable plan, policy, or regulation would be **less than significant**.

#### 4.4.5 Mitigation Measures

While the project is not expected to generate GHGs that are cumulatively considerable, the following measure is recommended to further reduce GHG emissions:

**MM GHG-1:** To ensure reductions below the expected “Business As Usual” (BAU) scenario, the project will implement a variety of measures that will reduce its greenhouse gas (GHG) emissions. To the extent feasible, and to the satisfaction of the City of Riverside (City), the following measure will be incorporated into the project construction:

- Divert at least 50 percent of the demolished and/or grubbed construction materials (including, but not limited to, soil, vegetation, concrete, lumber, metal, and cardboard).

**MM GHG-1** would reduce GHGs by reducing landfill-bound materials that could potentially generate methane. However, exact reductions cannot be quantified.

#### 4.4.6 Environmental Impacts After Mitigation Is Incorporated

As stated previously, the proposed project’s contribution to global GHG emissions and the resultant effect on global climate should be evaluated on a cumulative basis. Under CEQA, a project would have a significant cumulative impact caused by the combined impact of past, present, and probable future projects if its incremental impact represents a “cumulatively considerable” contribution to such cumulative impacts (Section 15064(h)). The proposed project would generate GHG emissions that would contribute to potential cumulative impacts of GHG emissions on climate change.

The project's contribution to climate change is not cumulatively considerable because it is a short-term demolition project. The project consists of the demolition of three existing buildings on a 3.14-acre site. Activities related to the project are limited to a two to three-month time span, and the project will not generate a significant long-term source of GHGs on the site. Future use of the site has been accounted for in the CBUSP MND, where it was found to have a less than significant impact on GCC. Therefore, cumulative impacts are **less than significant**.

#### 4.4.7 References

14 CCR 15000–15387 and Appendices A–L. Guidelines for Implementation of the California Environmental Quality Act, as amended.

CAPCOA (California Air Pollution Control Officers Association). 2008. *CEQA & Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act*. January 2008.

CAT (California Climate Action Team). 2006. *Climate Action Team Report to Governor Schwarzenegger and the Legislature*. Sacramento, California: CAT. March 2006. [http://www.climatechange.ca.gov/climate\\_action\\_team/reports/2006report/2006-04-03\\_FINAL\\_CAT\\_REPORT.PDF](http://www.climatechange.ca.gov/climate_action_team/reports/2006report/2006-04-03_FINAL_CAT_REPORT.PDF).

CAT. 2010a. *Climate Action Team Biennial Report*. Sacramento, California: CAT. April 2010. <http://www.energy.ca.gov/2010publications/CAT-1000-2010-004/CAT-1000-2010-004.PDF>.

CAT. 2010b. *Climate Action Team Report to Governor Schwarzenegger and the California Legislature*. Sacramento, California: CAT. December 2010. <http://www.energy.ca.gov/2010publications/CAT-1000-2010-005/CAT-1000-2010-005.PDF>.

City of Riverside. 2010. *City of Riverside Baseline Community Greenhouse Gas Emissions Inventory*. July 2010.

City of Riverside. 2012. *Green Action Plan*.

IPCC (Intergovernmental Panel on Climate Change). 2007. *Climate Change 2007: The Physical Science Basis–Summary for Policymakers*. [http://ipcc-wg1.ucar.edu/wg1/docs/WG1AR4\\_SPM\\_PlenaryApproved.pdf](http://ipcc-wg1.ucar.edu/wg1/docs/WG1AR4_SPM_PlenaryApproved.pdf).

OPR (California Governor's Office of Planning and Research). 2008. *Technical Advisory – CEQA and Climate Change: Addressing Climate Change through California Environmental Quality Act (CEQA) Review*. June 19, 2008.

Western Regional Climate Center. Accessed December 2014. <http://www.wrcc.dri.edu>.

## 4.5 HAZARDS AND HAZARDOUS MATERIALS

The following discussion and analysis, based on the Initial Study (IS) and the Notice of Preparation (NOP) public comment period, focuses on the potentially adverse impacts from implementation of the proposed Riverside Free Methodist Church (RFMC) Demolition Project (proposed project) related to emitting hazardous emissions or handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school; being located on a hazardous materials list that could create a hazard to the public or the environment; or interfering with an adopted emergency response plan or emergency evacuation plan. During the preparation of the IS, potential impacts related airport safety, emergency evacuation plans, and wildland fires were found to be either less than significant or had no impact and are therefore not discussed further in this Draft Environmental Impact Report (DEIR).

In addition to other documents, the following references were used in the preparation of this section of the DEIR:

- *Phase 1 Environmental Site Assessment (ESA), Riverside Free Methodist Church* (Converse Consultants 2014; included in the DEIR as Appendix E).
- *Final Program EIR for the City of Riverside General Plan (GP)* (Final GP PEIR; City of Riverside 2007a).

### 4.5.1 Setting

#### **Hazardous Materials History**

Converse Consultants conducted a Phase 1 ESA in June 2014 (Appendix E) to review the history of the project site for any indication of on-site historical or current uses that would have caused impacts to the soil or groundwater with hazardous materials. The Phase 1 ESA, including a review of historical information such as aerial photographs, historical topographic maps, Sanborn Fire Insurance Maps, and city directories provided by Environmental Data Resources Inc. (EDR) was conducted in order to document prior uses of the project site that might indicate sources of contamination from past uses that could have used hazardous materials. According to EDR, there is no Sanborn map coverage of the property.

Table 4.5-1 summarizes the land uses and historical development of the site from 1931 to 2012 that could be seen from a review of historical aerial photographs and topographic maps.

**Table 4.5-1**  
**Review of Historical Aerial Photographs and Topographic Maps**

Date	Reference	Description
1931, 1938	Aerial Photographs	<p>The property appeared to be used for agriculture (orchards). The adjacent properties were depicted as the following:</p> <ul style="list-style-type: none"> <li>• North – Agricultural land.</li> <li>• South – An unimproved road, followed by agricultural land.</li> <li>• East – Agricultural land, followed by an unimproved road.</li> <li>• West – Agricultural land.</li> </ul> <p>The general vicinity of the property was depicted primarily as agricultural land with scattered rural residences.</p>
1948, 1953	Aerial Photographs	<p>Except for the property appearing as vacant land, the adjacent north and west properties appearing as vacant land, and increases in residences in the general vicinity, no significant changes occurred to property, adjacent properties, or general vicinity, since the previous aerial photograph in 1938.</p>
1963	Aerial Photograph	<p>The property appeared to be vacant land. The adjacent properties were depicted as the following:</p> <ul style="list-style-type: none"> <li>• North – Vacant land, followed by agricultural land.</li> <li>• South – An improved road (Diane Avenue), followed by an on-ramp for State Route 91 (Riverside Freeway).</li> <li>• East – Agricultural land, followed by an improved road (Adams Street).</li> <li>• West – Vacant land, followed by agricultural.</li> </ul> <p>The general vicinity of the property was depicted primarily as residences, agricultural land and scattered commercial properties. State Route 91 (Riverside Freeway) was depicted approximately 100 feet south of the property.</p>
1967	Aerial Photograph	<p>Except for the property developed with two buildings on the southern and northwest portions and increases in residences and commercial properties in the general vicinity, no changes to the property, adjacent properties, or general vicinity since the previous aerial photograph in 1963.</p>
1977	Aerial Photograph	<p>Except for the east adjacent property appearing as a commercial shopping center, and continued increases in residences and commercial properties, no changes to the property, adjacent properties, or general vicinity since the previous aerial photograph in 1967.</p>
1978, photorevised 1980	Topographic Map	<p>The property was depicted with a church building on the southern portion and additional building on the northwest portion. The adjacent properties and general vicinity were depicted in the same configuration as viewed in the 1977 aerial photograph.</p>
1990, 1994	Aerial Photographs	<p>Except for the property developed with an additional building on the northeast portion and the general vicinity primarily developed with residences and commercial properties, no changes to the property, adjacent properties, or general vicinity since the previous aerial photograph in 1977.</p>
2005, 2006, 2009, 2010, 2012	Aerial Photographs	<p>Except for the west adjacent property appearing as an asphalt paved lot and continued gradual increases in residences and commercial properties in the vicinity, no changes to the property, adjacent properties, or general vicinity since the previous aerial photograph in 1990.</p>

Source: Table 1, Converse Consultants (Appendix E).

### **Historical Uses**

According to historical information gathered by Converse, the project site appeared to be agricultural groves from at least 1931 to 1938. By 1948, the site appeared to be vacant land. In 1963, the site was developed with two church buildings on the southern and northwest portions. In 1979, the site was developed with an educational building on the northeast portion. The project site appeared to remain in the same configuration as observed during the June 2014 reconnaissance.

The historical use of the adjoining properties appears to have been primarily agricultural land as early as 1931 to 1938. By 1948, the north and west adjoining properties appeared to be vacant land. By 1963, the south adjoining property appeared to be an improved road (Diane Avenue) followed by State Route 91 (Riverside Freeway). By 1977, the east adjoining property appeared to be a commercial retail shopping center. By 2005, the adjoining west property appeared to be an asphalt paved lot. The adjoining properties appeared to remain the same as observed during the August 2013 property reconnaissance.

### **Site Reconnaissance**

On June 19, 2014, Converse visited the project site to determine present use and to identify environmental conditions. Their methodology involved walking the perimeters, centerlines, and accessible interior and exterior areas of the site while noting observed evidence of present and potential environmental concerns.

### **Existing Conditions**

The project site currently consists of an approximate 3.14-acre, rectangular shaped lot developed with a church facility (RFMC), located at 8431 Diana Avenue in the City of Riverside, Riverside County, California. The facility consists of a worship center building on the southern portion and two administrative and classroom type buildings on the northern portion.

Chemicals stored on site are related to routine facility maintenance. Over the counter cleaners and chemicals, including floor stripper and cleaner, floor wax, glass cleaner, and hand soap were observed in a storage closet in the northwest classroom building. No leaks, stains, or odors were noted. No evidence of recognized environmental conditions was found in connection with the project site. The database search conducted by EDR found that the site was not listed in any of the environmental records searched.

### **Related Regulations**

#### ***Federal***

Several Federal agencies regulate hazardous materials. These include the U.S. Environmental Protection Agency (EPA), the Occupational Safety and Health Administration (OSHA), and the U.S. Department of Transportation (DOT). Applicable Federal regulations are contained primarily in Titles 10, 29, 40, and 49 of the Code of Federal Regulations (CFR). In particular, Title 49 of the CFR governs the manufacture of packaging and transport containers, packing and repacking, and labeling, as well as marking hazardous material transport. Some of the major Federal laws and issue areas include the following statutes:

- Resource Conservation and Recovery Act (RCRA) – hazardous waste management.
- Hazardous and Solid Waste Amendments Act – hazardous waste management.
- Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) – cleanup of contamination.
- Superfund Amendments and Reauthorization Act (SARA) – cleanup of contamination.
- Emergency Planning and Community Right-to-Know (SARA Title III) – business inventories and emergency response planning.
- Hazardous Substances Act (15 U.S.C. 1261–1278) – requirements that certain hazardous household products (hazardous substances) bear cautionary labeling to alert consumers to the potential hazards that those products present and to inform them of the measures they need to protect themselves from those hazards.

The EPA is the primary Federal agency responsible for the implementation and enforcement of hazardous materials regulations. In most cases, enforcement of environmental laws and regulations established at the Federal level is delegated to state and local environmental regulatory agencies.

#### ***State***

Primary State agencies with jurisdiction over hazardous chemical materials management are the Department of Toxic Substances Control (DTSC) and the local Santa Ana Regional Water Quality Control Board (RWQCB). Other State agencies involved in hazardous materials management are the Department of Industrial Relations (State Occupational Safety and Health Administration implementation), Office of Emergency Services (California Accidental Release Prevention implementation), California Department of Fish and Wildlife, California Air Resources Board, California Department of Transportation (Caltrans), State Office of

Environmental Health Hazard Assessment (Proposition 65 implementation), and the California Integrated Waste Management Board (CIWMB).

The enforcement agencies for hazardous materials transportation regulations are the California Highway Patrol and Caltrans. Hazardous materials and waste transporters are responsible for complying with all applicable packaging, labeling, and shipping regulations. South Coast Air Quality Management District Rules and Regulations pertain to asbestos abatement (including Rule 1403) and Construction Safety Orders 1529 (pertaining to asbestos) and 1532.1 (pertaining to lead) from Title 8 of the California Code of Regulations (CCR). Hazardous chemical and biohazardous materials management laws in California include the following statutes:

- **Hazardous Materials Management Act** – This act requires that businesses handling or storing certain amounts of hazardous materials prepare a hazardous materials business emergency plan (HMBEP) that includes an inventory of hazardous materials stored on site (above specified quantities), an emergency response plan, and an employee training program.
- **Hazardous Waste Control Act** – Codified at California Health and Safety Code, Division 20, Chapter 6.5, Article 2, Section 25100 et seq., this act authorizes the DTSC and local Certified Unified Program Agencies (CUPAs) to regulate facilities that generate or treat hazardous waste.
- **Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65)** – This act requires the governor to publish and update, at least annually, a list of chemicals known to the state to cause cancer, birth defects, or other reproductive harm, and to inform citizens about exposures to such chemicals.
- **Hazardous Waste Management Planning and Facility Siting** – Also known as the Tanner Act, Assembly Bill (AB) 2948 (1986) requires counties to prepare hazardous waste management plans for DTSC approval, and prescribes specific public participation activities that must be carried out during the local land use permit process for siting new or expanding off-site commercial treatment, storage, and disposal facilities.
- **Hazardous Materials Storage and Emergency Response Plans** – AB 2185, which regulates hazardous materials storage and emergency response plans, requires immediately reporting to local fire departments and the Office of Emergency Services any release or threatened release of a hazardous material, regardless of the amount handled by the business.
- **California Medical Waste Management Act** – As codified in the California Health and Safety Code, Sections 117600–118360, the act establishes procedures for the proper handling, storage, treatment, and transportation of medical waste.

- Land Disposal Restrictions – Restrictions codified in 22 CCR 18 were set up by Congress in 1984 for the EPA. These restrictions ensure that toxic constituents present in hazardous waste are properly treated before hazardous waste is land disposed.

State regulations and agencies pertaining to hazardous materials management and worker safety are described in the following subsections.

##### ***California Environmental Protection Agency***

The California Environmental Protection Agency (Cal/EPA) has broad jurisdiction over hazardous materials management in the State. Within Cal/EPA, the DTSC has primary regulatory responsibility for hazardous waste management and cleanup. Enforcement of regulations has been delegated to local jurisdictions that enter into agreements with the DTSC for the generation, transport, and disposal of hazardous materials under the authority of the Hazardous Waste Control Law.

Along with the DTSC, the RWQCB is responsible for implementing regulations pertaining to management of soil and groundwater investigation and cleanup. RWQCB regulations are contained in Title 27 of the CCR. Additional State regulations applicable to hazardous materials are contained in Title 22 of the CCR. Title 26 of the CCR is a compilation of those sections or titles of the CCR that are applicable to hazardous materials.

##### ***Investigation and Cleanup of Contaminated Sites***

The oversight of hazardous materials release sites often involves several different agencies that may have overlapping authority and jurisdiction. The DTSC and RWQCB are the two primary State agencies responsible for issues pertaining to hazardous materials release sites. Air quality issues related to remediation and construction at contaminated sites are also subject to Federal and State laws and regulations that are administered at the local level.

Investigation and remediation activities that would involve potential disturbance or release of hazardous materials must comply with applicable Federal, State, and local hazardous materials laws and regulations. The DTSC has developed standards for the investigation of sites where hazardous materials contamination has been identified or could exist based on current or past uses. The standards identify approaches to determine whether a release of hazardous wastes/substances exists at a site and delineates the general extent of contamination; estimates the potential threat to public health and/or the environment from the release and provides an indicator of relative risk; determines whether an expedited response action is required to reduce an existing or potential threat; completes preliminary project scoping activities to determine data gaps; and identifies possible remedial action strategies to form the basis for development of a site strategy.

***Government Code Section 65962.5***

Pursuant to Government Code 65962.5, environmental regulatory database lists were reviewed to identify and locate properties with known hazardous substance contamination within the proposed project area (California Government Code, Section 65960 et seq.). Four State agencies are required to provide lists of facilities that have contributed, harbor, or are responsible for environmental contamination within their jurisdiction. The four State agencies that are required to provide these lists to the Secretary for Environmental Protection include the DTSC, the State Department for Health Services, the State Water Resources Control Board (SWRCB), and the CIWMB. The Secretary for Environmental Protection then takes each of the four respective agency lists and forms one list, referred to as the Hazardous Waste and Substances Site List – Site Cleanup and also known as the Cortese List, which is made available to every city and/or county in California (DTSC 2007).

The DTSC maintains lists of hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code; land designated as hazardous waste property or border zone property pursuant to Article 11, Chapter 6.5, Division 20 of the Health and Safety Code; information received by the DTSC pursuant to Section 25242 of the Health and Safety Code on hazardous waste disposal on public land; sites listed pursuant to Section 25356 of the Health and Safety Code; and sites on the Abandoned Site Assessment Program.

The Department for Health Services maintains lists of all public drinking water wells that contain detectable levels of organic contaminants and wells that are subject to special water analysis. The SWRCB maintains lists of unauthorized release reports for Underground Storage Tanks (USTs) pursuant to Section 25295 of the Health and Safety Code; solid waste disposal facilities from which there has been a migration of hazardous waste; and all cease-and-desist orders issued after January 1, 1986, concerning hazardous waste discharges. The CIWMB maintains lists of solid waste disposal facilities from which there is a known migration of hazardous waste. The Hazardous Waste and Substances List has been reviewed to identify hazardous sites that may affect the proposed project. A search of available environmental records was conducted by Converse Consultants for documented hazardous material sites, in accordance with American Society for Testing and Materials (ASTM) Standard of Practice E 1527-05, “Standard Practice for Environmental Site Assessments: Phase 1 Environmental Site Assessment Process.” An Environmental Data Resources (EDR) report of Standard Environmental Record Sources (Records) was prepared specifically for the property. The records search was conducted within a one-mile radius of the project site. A detailed list of the databases searched can be found in Appendix E of this EIR.

The project site and adjacent properties were not identified in the databases searched in the EDR report. Other off-site locations of concern identified by EDR within a maximum one-mile radius

from the property included State and local permitted hazardous materials generators, active and historical UST sites, Leaking UST (LUST) sites, Hist CORTESE sites, a Notify 65 site, a dry cleaners site, EnviroStor sites, historical auto stations (U.S. Hist Auto Stat), and Historical Dry Cleaners sites (U.S. Hist Cleaners).

According to the Converse Consultants, the potential for environmental concern to the property from these off-site locations of concern appears to be low due to one or more of the following: type of regulatory listing; type of resource (e.g., soil only); status of the case (e.g. no further action); no leaks reported, location with respect to the direction of regional groundwater; and/or distance from the property.

### ***Local***

#### City of Riverside General Plan 2025

The Public Safety Element of the *City of Riverside (City) General Plan 2025* (General Plan; City of Riverside 2007b) includes the following selected objective and policies that will be applied to the proposed project related to hazards and hazardous materials:

**Objective PS-3:** Minimize risks associated with the storage, transport, and disposal of hazardous materials.

**Policy PS-3.1:** Ensure that hazardous materials used in business and industry are handled properly.

**Policy PS-3.2:** Provide the Fire Department with resources to ensure that hazardous materials used and generated by businesses are handled properly.

**Policy PS-3.4:** Reduce the risks associated with ground transportation hazards, where feasible.

**Policy PS-3.5:** Encourage sewer service to minimize groundwater contamination.

The City's Final GP PEIR identifies hazardous waste sites as shown on Figure 5.7-1 of the Final GP PEIR. There are seven CERCLIS sites in the City; of these seven, one is on the National Priority List. The project site is not identified as a hazardous waste site in the City's General Plan.

### **4.5.2 Thresholds of Significance**

Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.) provides guidance for evaluating whether a development project may result in significant impacts. Based on the IS and Appendix G, the project could have a significant impact on hazards and hazardous materials if the proposed project would:

- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment.
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area.
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

### **4.5.3 Project Elements That Can Reduce Impacts**

The project has not proposed any design features related to hazard and hazardous substance impacts.

### **4.5.4 Environmental Impacts Before Mitigation**

Findings from the Phase 1 ESA were based on a review of historical source information; a radius search performed by EDR; an interview of property owner Mr. Daniel Wesley Bishop; an interview of Ms. Mary Edwards of the Santa Ana Regional Water Quality Control Board and a site reconnaissance dated June 19, 2014. The site reconnaissance consisted of walking the site, taking notes on observations, and taking photographs.

***Threshold: Would the project***

***Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?***

***Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?***

The project consists of the demolition of the three existing buildings and will involve site clearing, demolition, and rough grading. Materials transported from the site may include debris from site clearing and rubble from demolition. The Phase 1 ESA did not identify any hazardous materials on-site; therefore, potential for their transport and exposure to the public or environment is considered low.

However, the site does have potential for environmental concerns that were outside the scope of the Phase 1 ESA. These include lead-based paint (LBP) and asbestos-containing materials

(ACM). LBP can be found in structures built prior to 1978. Prior to the 1970s, asbestos was incorporated into various construction components including floor tiles and thermal insulation. The church facility and fellowship hall at the site were built in 1963–64, while the educational building was constructed later, in 1979. Due the age of the church and fellowship hall, there exists a potential significant hazard related to exposure of workers and the public to LBP and ACM during demolition activities.

If not properly handled and removed, asbestos can become airborne during demolition activities and pose a health hazard. Additionally, lead-based paint can pose an ingestion hazard if it becomes entrained into the air or water during demolition activities. Therefore, since it is unknown whether there is asbestos or lead-based paint in the buildings on-site, implementation of Mitigation Measure (MM) HAZ-1 shall be incorporated, which will ensure that all asbestos and lead-based paint materials are identified and remediated per the requirements identified by the County of Riverside Department of Environmental Health (DEH). Impacts would be considered **less than significant with mitigation incorporated**.

***Threshold: Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?***

The project site is bordered by California Baptist University facilities to the north, west, and east. There are no other schools located within one-quarter mile of the project site. The nearest school to the project site is Riverside Christian High School, approximately 0.4 mile west of the project site. Other nearby schools include Chemawa Middle School approximately 0.5 mile northwest of the project site and Sherman Indian High School approximately 0.6 mile west of the project site.

The site's current use as a church facility does not involve the handling of hazardous or acutely hazardous materials. Chemicals stored on site are related to routine facility maintenance. Over the counter cleaners and chemicals, including floor stripper and cleaner, floor wax, glass cleaner, and hand soap were observed in a storage closet in the northwest classroom building. No leaks, stains or odors were noted. No evidence of recognized environmental conditions was found in connection with the project site. The database search conducted by EDR found that the site was not listed in any of the environmental records searched. The project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of a school. Impacts would be considered **less than significant** and no mitigation is required.

***Threshold: Would the project be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?***

Government Code, Section 65962.5, combines several regulatory lists of sites that may pose a hazard related to hazardous materials or substances. According to Government Code, Section 65962.5(a), there are no hazardous materials or waste sites located on the project site. Additionally, the Phase 1 ESA concluded that there are no recognized environmental conditions at the project site. The project site and adjoining properties were not listed on any of the databases searched by EDR. Off-site hazardous materials sites identified in the database are expected to have a low potential to affect the project site. The proposed project is not considered a hazardous materials site and therefore would not create a significant hazard to the public or the environment. Therefore, impacts are **less than significant** and no mitigation is required.

#### **4.5.5 Mitigation Measures**

Section 15126.4 of the CEQA Guidelines requires EIRs to describe feasible measures that will reduce significant adverse impacts. The following mitigation measure has been evaluated for feasibility and is incorporated to reduce potentially significant impacts related to the potential of creating a significant hazard to the public or the environment during demolition activities.

**MM HAZ-1:** Prior to demolition activities of the proposed project, a lead-based paint and asbestos survey shall be conducted. Should lead-based paint or asbestos-containing materials be identified during survey, abatement of these materials will be accomplished in accordance with local, State, and Federal guidelines.

#### **4.5.6 Environmental Impacts After Mitigation Is Incorporated**

Impacts related to hazards and hazardous materials can be mitigated to less than significant levels by incorporating the mitigation measure as described in Section 4.5.5. Therefore, because regulatory thresholds will have to be met, per State and local regulations as described above if any residual contamination is found by complying with the mitigation measures, no significant adverse impacts would remain after mitigation.

#### **4.5.7 References**

14 CCR 15000–15387 and Appendices A–L. Guidelines for Implementation of the California Environmental Quality Act, as amended.

City of Riverside. 2007a. *Final Program Environmental Impact Report for the City of Riverside General Plan*. Adopted November 2007. Riverside, California: Prepared for the City of

Riverside Community Development Department, Planning Division, by Albert A. Webb Associates.

City of Riverside. 2007b. *City of Riverside 2025 General Plan*. Adopted November 2007. Riverside, California: City of Riverside Community Development Department. <http://www.riversideca.gov/planning/gp2025program/>.

DTSC (California Department of Toxic Substances Control). 2007. DTSC's Hazardous Waste and Substances Site List – Site Cleanup (Cortese List).

## 4.6 NOISE

This section presents a discussion of noise levels that would be affected by the Riverside Free Methodist Church Demolition Project (proposed project). The Initial Study (IS) for the project (Appendix A) addressed impacts related to creating a permanent increase in noise, and noise impacts caused by being in the vicinity of an airport or private airstrip; the IS concluded that the project would either have no impact or a less than significant impact for these issues. Therefore, these impacts will not be addressed further in the project's draft Environmental Impact Report (DEIR).

The focus of this section will be on whether the project will expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies; expose persons to or generate excessive groundborne noise levels; or cause temporary or periodic increases in ambient noise levels in the project vicinity above levels existing without the project, such that the proposed project would expose people residing or working in the project area to excessive noise levels.

In addition to other documents, the following references were used in the preparation of this section of the DEIR.

- City of Riverside General Plan (GP) 2025 (City of Riverside 2007a);
- Riverside General Plan 2025 Final EIR (City of Riverside 2007b);
- City of Riverside Municipal Code (Title 19) (City of Riverside 2007c); and
- *Noise Impact Analysis*, LSA Associates, Inc., December 2014 (Appendix F).

### 4.6.1 Setting

#### Existing Conditions

The City of Riverside (City) is subject to typical urban noises, such as noise generated by traffic, heavy machinery, and day-to-day outdoor activities. Noise around the project site is the cumulative effect of noise from transportation activities and stationary sources. "Transportation noise" typically refers to noise from automobile use, trucking, airport operations, and rail operations. "Non-transportation noise" typically refers to noise from stationary sources such as hospital operations (e.g., ambulance sirens); machinery; heating, ventilation, and air conditioning (HVAC) systems; compressors; and landscape maintenance equipment. Regardless of the type of noise, the noise levels are highest near the source and decrease with distance.

Sound may be described in terms of level or amplitude (measured in decibels [dB]), frequency or pitch (measured in hertz [Hz] or cycles per second), and duration (measured in seconds or

minutes). The standard unit of measurement of the amplitude of sound is the decibel. Because the human ear is not equally sensitive to sound at all frequencies, a special frequency-dependent rating scale is used to relate noise to human sensitivity. The A-weighted decibel (dBA) scale performs this compensation by discriminating against low and very high frequencies in a manner approximating the sensitivity of the human ear.

Noise is defined as unwanted sound, and is known to have several adverse effects on people, including hearing loss, speech interference, sleep interference, physiological responses, and annoyance. Based on these known adverse effects of noise, the Federal Government, the State of California, and local agencies have established criteria to protect public health and safety, to prevent disruption of certain human activities, and to minimize annoyance.

Several descriptors of noise (noise metrics) exist to help predict average community reactions to the adverse effects of environmental noise, including traffic-generated noise, on a community. These descriptors include the equivalent noise level over a given period ( $L_{eq}$ ), the day–night average noise level ( $L_{dn}$ ), and the community noise equivalent level (CNEL). Each of these descriptors uses A-weighted decibel units (dBA).

$L_{eq}$  is a sound energy level averaged over a specified time period (usually 1 hour).  $L_{eq}$  is a single numerical value that represents the amount of variable sound energy received by a receptor during a time interval. For example, a 1-hour  $L_{eq}$  measurement would represent the average amount of energy contained in all the noise that occurred in that 1 hour.  $L_{eq}$  is an effective noise descriptor because of its ability to assess the total time-varying effects of noise on sensitive receptors.  $L_{max}$  is the greatest sound level measured during a designated time interval or event.

Unlike the  $L_{eq}$  metric,  $L_{dn}$  and CNEL metrics always represent 24-hour periods, usually on an annualized basis.  $L_{dn}$  and CNEL also differ from  $L_{eq}$  because they apply a time-weighted factor designed to emphasize noise events that occur during the evening and nighttime hours (when speech and sleep disturbance is of more concern). “Time weighted” refers to the fact that  $L_{dn}$  and CNEL penalize noise that occurs during certain sensitive periods. In the case of CNEL, noise occurring during the daytime (7:00 a.m.–7:00 p.m.) receives no penalty. Noise during the evening (7:00 p.m.–10:00 p.m.) is penalized by adding 5 dB, while nighttime noise (10:00 p.m.–7:00 a.m.) is penalized by adding 10 dB.  $L_{dn}$  differs from CNEL in that the daytime period is defined as 7:00 a.m.–10:00 p.m., eliminating the evening period.  $L_{dn}$  and CNEL are the predominant criteria used to measure roadway noise affecting residential receptors. These two metrics generally differ from one another by no more than 0.5–1 dB.  $L_{eq}$  is generally used to measure noise affecting sensitive receptors where noise is not a concern during the evening and nighttime periods (e.g., schools, office buildings) or where the noise is only generated during daytime hours (e.g., construction).

Table 4.6-1 represents some typical noise levels found in the existing environment. Noise-sensitive uses near the project site include CBU on-campus apartments to the west and north, additional apartments to the northeast, commercial retail buildings to the east, and other CBU facilities to the north.

**Table 4.6-1**  
**Typical Sound Levels in the Environment and Industry**

Common Outdoor Activities	Noise Level (dB)	Common Indoor Activities
—	110	Rock Band
Jet flyover at 300 meters (1,000 feet)	100	—
Gas lawn mower at 1 meter (3 feet)	90	—
Diesel truck at 15 meters (50 feet), at 80 kph (50 mph)	80	Food blender at 1 meter (3 feet) Garbage disposal at 1 meter (3 feet)
Noisy urban area, daytime gas lawn mower at 30 meters (100 feet)	70	Vacuum cleaner at 3 meters (10 feet)
Commercial area Heavy traffic at 90 meters (300 feet)	60	Normal speech at 1 meter (3 feet)
Quiet urban daytime	50	Large business office Dishwasher, next room
Quiet urban nighttime	40	Theater, large conference room (background)
Quiet suburban nighttime	30	Library
Quiet rural night time	20	Bedroom at night, concert hall (background)
—	10	Broadcast/recording studio
Lowest threshold of human hearing	0	Lowest threshold of human hearing

Source: Caltrans 1998.

kph = kilometers per hour; mph = miles per hour

Currently, the project site generates noise primarily from vehicular traffic. Traffic on Diana Avenue, Adams Street, State Route 91 (SR-91), and other local streets is the dominant source of ambient noise.

## **Related Regulations**

### ***Federal***

There are no applicable Federal regulations related to noise that would apply to this project.

### *State*

#### Government Code Section 65302(g)

California Government Code Section 65302(g) requires the preparation of a Noise Element, which shall identify and appraise the noise problems in the community. The Noise Element shall recognize the guidelines adopted by the Office of Noise Control in the State Department of Health Services and shall quantify, to the extent practicable, current and projected noise levels for the following sources:

- Highways and freeways;
- Primary arterials and major local streets;
- Passenger and freight on-line railroad operations and ground rapid transit systems;
- Aviation and airport-related operations;
- Local industrial plants; and
- Other ground stationary noise sources contributing to the community noise environment.


### *Local*

#### General Plan – Noise Element

The City's Noise Element can be found in the General Plan (GP) (City of Riverside 2007a). The Noise Element examines noise sources in the City with a view toward identifying and appraising the potential for noise conflicts and identifying ways to reduce existing and potential noise impacts to sensitive receptors. In particular, the Noise Element contains policies and programs to achieve and maintain noise levels compatible with various types of land uses. The Noise Element addresses noise that affects the community at large, rather than noise associated with site-specific conditions. However, the programs in the Noise Element do address effective strategies to reduce and limit community exposure to loud noise sources.

In regard to land use compatibility criteria, new construction or development generally should not be undertaken if it falls within the conditionally unacceptable range unless it can be demonstrated that noise reduction requirements can be employed to reduce noise impacts to an acceptable level. If new construction or development does proceed, a detailed analysis of noise reduction requirements must be made and needed noise insulation features included in the design. Figure 4.6-1 depicts the noise compatibility criteria established by the City's Noise Element. Based on the Noise/Land Use Noise Compatibility Criteria, the City considers a CNEL greater than 75 dBA to be normally unacceptable for commercial uses, a CNEL greater than 70 dBA to be normally unacceptable for hospital operations, and a CNEL greater than 65 dBA to be normally unacceptable for single-family residential uses.

Land Use Category	Community Noise Equivalent Level (CNEL) or Day-Night Level (Ldn), dB						
	55	60	65	70	75	80	85
Single Family Residential*							
Infill Single Family Residential*							
Commercial- Motels, Hotels, Transient Lodging							
Schools, Libraries, Churches, Hospitals, Nursing Homes							
Amphitheaters, Concert Hall, Auditorium, Meeting Hall							
Sports Arenas, Outdoor Spectator Sports							
Playgrounds, Neighborhood Parks							
Golf Courses, Riding Stables, Water Rec., Cemeteries							
Office Buildings, Business, Commercial, Professional							
Industrial, Manufacturing Utilities, Agriculture							
Freeway Adjacent Commercial, Office, and Industrial Uses.							

 **Normally Acceptable**

Specific land use is satisfactory, based on the assumption that any building is of normal conventional construction, without any special noise insulation requirements.

 **Conditionally Acceptable**

New construction or development should be undertaken only after a detailed analysis of noise reduction requirements is made and needed noise insulation features included in design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning, will normally suffice.

 **Normally Unacceptable**

New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of noise reduction requirements must be made and needed noise insulation features included in design.

 **Conditionally Unacceptable**

New construction or development should generally not be undertaken, unless it can be demonstrated that noise reduction requirements can be employed to reduce noise impacts to an acceptable level. If new construction or development does proceed, a detailed analysis of noise reduction requirements must be made and needed noise insulation features included in the design.

**Nature of the noise environment where the CNEL or Ldn level is:**

**Below 55 dB**

Relatively quiet suburban or urban areas, no arterial streets within 1 block, no freeways within 1/4 mile.

**55-65 dB**

Most somewhat noisy urban areas, near but not directly adjacent to high volumes of traffic.

**65-75 dB**

Very noisy urban areas near arterials, freeways or airports.

**75+ dB**

Extremely noisy urban areas adjacent to freeways or under airport traffic patterns. Hearing damage with constant exposure outdoors.

The Community Noise Equivalent Level (CNEL) and Day-Night Noise Level (Ldn) are measures of the 24-hour noise environment. They represent the constant A-weighted noise level that would be measured if all the sound energy received over the day were averaged. In order to account for the greater sensitivity of people to noise at night, the CNEL weighting includes a 5-decibel penalty on noise between 7:00 p.m. and 10:00 p.m. and a 10-decibel penalty on noise between 10:00 p.m. and 7:00 a.m. of the next day. The Ldn includes only the 10-decibel weighting for late-night noise events. For practical purposes, the two measures are equivalent for typical urban noise environments.

\* For properties located within airport influence areas, acceptable noise limits for single family residential uses are established by the Riverside County Airport Land Use Compatibility Plan.

SOURCE: STATE DEPARTMENT OF HEALTH,  
AS MODIFIED BY THE CITY OF RIVERSIDE

L S A

FIGURE 4.6-1

*Riverside Free Methodist  
Church Demolition Project  
Environmental Impact Report*

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The City does not have a specific noise criterion for evaluating off-site noise impacts to residences or noise-sensitive areas from project-related traffic. Under controlled conditions in an acoustics laboratory, the trained, healthy human ear is able to discern changes in sound levels of 1 dB when exposed to steady, single-frequency signals in the mid-frequency range. Outside such controlled conditions, the trained ear can detect changes of 2 dB in normal environmental noise. The average healthy ear can barely perceive noise level changes of 3 dB. A change of 5 dB is readily perceptible, and a change of 10 dB is perceived as twice as loud or half as loud. A doubling of sound energy results in a 3 dB increase in sound, which means that a doubling of sound energy (e.g., doubling the volume of traffic on a road) would result in a barely perceptible change in sound level. As noted in the City's GP 2025 Final EIR (2007b), noise analysis methodology is accurate only to the nearest whole decibel and most people only notice a change in the noise environment when the difference in noise levels is around 3 dB. An increase or decrease in noise level of at least 5 dB is required before any noticeable change in community response would be expected. Therefore, a clearly perceptible increase (+5 dB) in noise exposure of sensitive receptors could be considered significant (City of Riverside 2007b). For the purposes of this noise analysis, impacts are considered significant when they cause an increase of 5 dB from existing noise levels or exceed the 65 dBA CNEL noise threshold.

#### Title 7 – City Noise Code

The City's Noise Code (Title 7) sets internal and external noise standards for specific land uses/zoning (Sections 7.25.010 and 7.30.015). The City Noise Code also has general noise regulations (Section 7.35.010) that regulate noise from construction activities, or any excessive or offensive noise, that causes discomfort to anyone of normal sensitivity.

Noise-generating sources in Riverside are regulated in Title 7 of the City's Municipal Code (City of Riverside 2007c). The noise limits apply to noise generation from one property to an adjacent property. The noise level limits depend on time of day, duration of the noise, and land use. The exterior noise level limits are depicted in Table 4.6-2. The noise level limits shall not be exceeded on or beyond the boundaries of the property on which the noise is produced. The noise level limit between two different districts is the arithmetic mean of the two districts. For example, the sound level limit between an office/commercial use and residential use is 55 dBA between the hours of 10:00 p.m. and 7:00 a.m., and 60 dBA between the hours of 7:00 a.m. and 10:00 p.m.

**Table 4.6-2**  
**Exterior Noise Limits**

Land Use Category	Noise Level (dBA)	
	<i>Nighttime</i> <i>10:00 p.m.–7:00 a.m.</i>	<i>Daytime</i> <i>7:00 a.m.–10:00 p.m.</i>
Residential	45	55
Office/commercial	65	65
Industrial/non-urban	70	70
Community support	60	60
Public recreation facility	65	65

Source: City of Riverside 2007c.

The City has established hourly restrictions and noise level limits for construction and demolition activities (City of Riverside 2007c). Construction and demolition activities are not permitted between the hours of 7:00 p.m. and 7:00 a.m. on weekdays, between 5:00 p.m. and 8:00 a.m. on Saturdays, or at any time on Sundays or Federal holidays such that the sound therefrom creates a noise disturbance across a residential or commercial property line or at any time exceeds the maximum permitted noise level for the underlying land use category, except for emergency work or by variance (City of Riverside 2007c).

Violation of these standards is related to both duration and intensity of the noise disturbance. Unless a variance has been granted, it shall be unlawful for any person to cause or allow the creation of any noise which exceeds the following:

- The exterior noise standard of the applicable land use category (Table 4.6-2), up to 5 dB, for a cumulative period of more than 30 minutes in an hour; or
- The exterior noise standard of the applicable land use category, plus 5 dB, for a cumulative period of more than 15 minutes in any hour; or
- The exterior noise standard of the applicable land use category, plus 10 dB, for a cumulative period of more than 5 minutes in any hour; or
- The exterior noise standard of the applicable land use category, plus 15 dB, for a cumulative period of more than 1 minute in any hour; or
- The exterior noise standard of the applicable land use category, plus 20 dB or the maximum measured ambient noise level, for any period of time.

Based on Table 4.6-2 and Sections 7.25.010 and 7.30.05 of the City's Municipal Code, the maximum exterior noise level for residential uses is 75 dBA  $L_{max}$  (55 dB plus 20 dB) during daytime hours and 65 dBA  $L_{max}$  (45 dB plus 20 dB) during nighttime hours, or the maximum

measured ambient noise level for any period of time. Similarly, the maximum interior nuisance noise level for residential uses is 55 dBA  $L_{\max}$  (45 dB plus 10 dB) during daytime hours and 45 dBA  $L_{\max}$  (35 dB plus 10 dB) during nighttime hours, or the maximum measured ambient noise level for any period of time.

#### City of Riverside General Plan 2025

The noise section of the City's 2025 General Plan (2007a) includes the following selected objectives and policies related to noise standards for construction-related, point source, and transportation-related sources that will be applied to the proposed project:

- Objective N-1:** Minimize noise levels from point sources throughout the community and, wherever possible, mitigate the effects of noise to provide a safe and healthful environment.
- Policy N-1.2:** Require the inclusion of noise-reducing design features in development consistent with standards in (Table 4.6-4, Noise/Land Use Compatibility Criteria), Title 24 California Code of Regulations and Title 7 of the Municipal Code.
- Policy N-1.3:** Enforce the City of Riverside Noise Control Code to ensure that stationary noise and noise emanating from construction activities, private developments/residences and special events are minimized.
- Policy N-1.4:** Incorporate noise considerations into the site plan review process, particularly with regard to parking and loading areas, ingress/egress points, and refuse collection areas.
- Policy N-1.5:** Avoid locating noise-sensitive land uses in existing and anticipated noise-impacted areas.
- Policy N-1.7:** Evaluate noise impacts from roadway improvement projects by using the City's Acoustical Assessment Procedure.
- Policy N-1.8:** Continue to consider noise concerns in evaluating all proposed development decisions and roadway projects.
- Policy N-2.2** Avoid placing noise-sensitive land uses (e.g., residential uses, hospitals, assisted living facilities, group homes, schools, day care centers, etc.) within the high noise impact areas (over 60 dB CNEL) for Riverside Municipal Airport and Flabob Airport in accordance with the Riverside County Airport Land Use Compatibility Plan.

**Objective N-4:** Minimize ground transportation-related noise impacts.

**Policy N-4.1:** Ensure that noise impacts generated by vehicular sources are minimized through the use of noise reduction features (i.e., earthen berms, landscaped walls, lowered streets, improved technology).

**Policy N-4.5:** Use speed limit controls on local streets as appropriate to minimize vehicle traffic noise.

### 4.6.2 Thresholds of Significance

Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.) provides guidance for evaluating whether a development project may result in significant impacts. Based on the IS prepared for the project and Appendix G, a development project could have a significant impact related to noise if the proposed project would:

- Expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.
- Expose persons to or generate excessive groundborne vibration or groundborne noise levels.
- Create a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.
- Create a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.
- Be located within an airport land use plan, or within two miles of a public airport or public use airport such that the proposed project would expose people residing or working in the project area to excessive noise levels (14 CCR 15000 et seq., Appendix G).

### 4.6.3 Project Elements That Can Reduce Impacts

Demolition activities would occur Monday through Friday from 7:00 a.m. to 7:00 p.m. and on Saturdays from 8:00 a.m. to 5:00 p.m., in compliance with the City's Municipal Code, Section 7.35.

### 4.6.4 Environmental Impacts Before Mitigation

The noise impact assessment utilized criteria established in the City of Riverside GP (2007a) and Municipal Code (City of Riverside 2007c), which are discussed in Section 4.6.1 of this EIR.

***Threshold: Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?***

### **Project Elements**

The proposed project involves the demolition of three existing on-site buildings. Project activities will consist of site clearing, building removal, and rough grading and will take approximately 28 workdays occurring over two to three months. Therefore, project noise generation is short-term and will result from increased traffic from workers commuting to the site, and from construction equipment.

The noise levels used to determine significance associated with on-site activities are shown in Table 4.6-2. For the purposes of this analysis, project-generated traffic noise impacts are considered significant when they cause an increase of 5 dB from existing noise levels or exceed the 65 dBA CNEL noise threshold. An increase or decrease in noise level of at least 5 dB is required before any noticeable change in community response would be expected. Therefore, a clearly perceptible increase (+5 dB) in noise exposure of sensitive receptors could be considered significant (City of Riverside 2007b).

### ***Short-Term Demolition Noise***

The project will include the following sequence of actions: (1) tree and landscape removal, (2) existing structure hazardous materials abatement, (3) building demolition, (4) demolition of hardscape and foundations, (5) removal of asphalt.

Two types of short-term noise impacts could occur during the demolition of the on-site buildings. First, construction crew commutes and the transport of construction equipment to the site for the proposed project would incrementally increase noise levels on access roads leading to the site. Although there would be a relatively high single-event noise exposure potential causing intermittent noise nuisance (passing trucks at 50 feet would generate up to a maximum of 87 dBA  $L_{max}$ ), the effect on longer term (hourly or daily) ambient noise levels would be small. The project is anticipated to generate 72 daily vehicle trips during the demolition period over two to three months. This level number of daily vehicle trips would be less than 10 percent of the daily traffic volumes on Diana Avenue and less than one percent of the average daily trips on Adams Street. The effect on the traffic noise would be a less than 0.5 dBA increase over the 24-hour period. This change is not perceptible to the human ear in an outdoor environment. Therefore, short-term construction-related impacts associated with worker commute and equipment transport to the project site would be **less than significant**.

The second type of short-term noise impact is related to noise generated during demolition of buildings on the project site. Table 4.6-3 lists maximum construction equipment noise levels ( $L_{max}$ ) included in the FHWA Highway Construction Noise Handbook (2006) that are based on a distance of 50 feet between the equipment and a noise receptor. The equipment included in Table 4.6-3 may potentially be used during the project. Typical noise levels range up to 90 dBA  $L_{max}$  at 50 feet during the demolition phase. Typical operating cycles for these types of construction equipment may involve 1 or 2 minutes of full power operation followed by 3 or 4 minutes at lower power settings. The average noise level during construction activities is generally lower, since maximum noise generation may only occur up to 50 percent of the time.

**Table 4.6-3**  
**Construction Equipment Noise Emission Levels**

Equipment	Typical Sound Level (dBA) 50 Feet from Source
Backhoe	80
Chain saw	85
Compressor (air)	80
Concrete saw	90
Crane, mobile	85
Dozer	85
Dump truck	84
Excavator	84
Flatbed truck	70
Generator	85
Jackhammer	85
Pavement Scarifier	85
Pickup truck	55
Pneumatic tools	85
Rivet Buster/Chipping Gun	85
Vacuum Street Sweeper	80
Welder/Torch	73

Source: *Highway Construction Noise Handbook* (FHWA 2006).

Table 4.6-3 demonstrates, construction equipment anticipated for all phases of project development would include only standard equipment that would be employed for any routine demolition project of this scale; construction equipment with substantially higher noise-generation characteristics (such as pile drivers, rock drills, blasting equipment) would not be necessary for development of any phase of the proposed project.

Land uses adjacent to the project site include commercial/retail uses and CBU facilities including on-campus apartments. The existing on-campus apartments are the closest noise-sensitive uses in the project vicinity. Because the apartments are approximately 85 feet from the building demolition area, distance divergence would provide for at least 6 dBA of noise reduction. Demolition on the project site would, therefore, not expose noise-sensitive uses in the project vicinity to noise levels exceeding 87 dBA  $L_{max}$ . Vehicular traffic on SR-91 and streets adjacent to these off-site sensitive uses would provide masking effects. Even with the effects of distance and masking, however, noise levels reaching the on-campus apartments are still considered potentially significant and mitigation is required. Mitigation Measures (MM) Noise-1 through Noise-4 will reduce impacts related to construction noise. With implementation of the mitigation measures, noise levels can be reduced to meet all applicable noise standards, and impacts are considered **less than significant with mitigation**.

### ***Long-Term Operational Noise Impact***

The project is limited to demolition activities occurring for approximately 28 days over a period of two to three months. Any noise impacts related to future use of this site have already been addressed in the CBU Specific Plan Mitigated Negative Declaration. Therefore, this project will have **no impact** related to long-term noise generation.

### ***Threshold: Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?***

Groundborne vibration is almost exclusively a concern inside buildings and is rarely perceived as a problem outdoors, where the motion may be discernable, but without the effects associated with the shaking of a building there is less adverse reaction. Demolition on the project site would result in the exposure of persons to excessive groundborne vibration or groundborne noise levels. Groundborne vibration during construction activity is temporary and would cease to occur after project demolition is completed.

The proposed project would not require the use of scrapers and graders, but will use construction equipment similar to large bulldozers, jackhammers, and other pneumatic tools. A large bulldozer would generate approximately a peak particle velocity (PPV) of 0.089 in/sec vibration when measured at 25 feet. A jackhammer would generate approximately 0.035 PPV inch/sec when measured at 25 feet, while a loaded truck would generate 0.076 PPV inch/sec at 25 feet.

Regarding the potential for building damage, vibration levels from construction equipment and activities, including bulldozers, trucks, and jackhammers, would be less than 0.1 inch/sec at 25 feet from the project demolition area and lower than the PPV of 0.2 inch/sec vibration damage criteria at the nearest commercial/retail buildings for nonengineered timber and masonry buildings (FTA 2006). For new commercial/residential buildings, the vibration damage potential

threshold recommended by Caltrans is 1 inch/sec from transient sources such as pile driving and blasting. Caltrans also states that it takes at least 0.9 inch/sec of PPV for the human response to be strongly perceptible, or 0.25 inch/sec to be distinctly perceptible (Caltrans 1992). The nearest sensitive uses/buildings are approximately 85 feet from the project demolition area, and no commercial buildings are within 50 feet of the project demolition area. None of the predicted vibration levels (all below 0.1 inch/sec) for sensitive uses in the vicinity of the project site would reach either of these two threshold levels. Thus, no significant vibration impacts are anticipated, and no mitigation is required.

Similarly, regarding human perception of vibration, loaded trucks and other heavy-tracked construction equipment generate approximately 92 VdB of groundborne vibration when measured at 50 feet, based on the FTA's Transit Noise and Vibration Impact Assessment (2006). Based on the Caltrans 1992 Transportation-Related Earthborne Vibrations, Technical Advisory, the vibration level at 100 feet is approximately 6 VdB lower than the vibration level at 50 feet. Vibration at 200 feet from the source is more than 6 VdB lower than the vibration level at 100 feet, or more than 12 VdB lower than the vibration level at 50 feet. Therefore, receptors at 100, 200, and 300 feet from the construction activity may be exposed to groundborne vibration up to 86, 80, and 76 VdB, respectively. The nearest sensitive uses are approximately 85 feet from the project demolition area and would not result in experience any potential vibration damage impacts. As a result, project vibration impacts are **less than significant**. No mitigation measures are required.

***Threshold: Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?***

The project's temporary noise increases would result from construction activities. As discussed previously, demolition activities have potentially significant noise impacts on nearby sensitive receivers. Land uses adjacent to the project site include commercial/retail uses and CBU facilities including on-campus apartments. The existing on-campus apartments are the closest noise-sensitive uses in the project vicinity. Because the apartments are 85 feet from the building demolition area, distance divergence would provide approximately 6 dBA of noise reduction. Demolition on the project site would, therefore, not expose noise-sensitive uses in the project vicinity to noise levels exceeding 87 dBA  $L_{max}$ . Vehicular traffic on SR-91 and streets adjacent to these off-site sensitive uses would provide masking effects. Even with the effects of distance and masking, however, noise levels reaching the on-campus apartments are still considered potentially significant and mitigation is required. MM Noise-1 through Noise-4 will reduce impacts related to demolition noise. With implementation of the mitigation measures, noise levels can be reduced to meet all applicable noise standards and impacts are considered **less than significant with mitigation**.

### 4.6.5 Mitigation Measures

CEQA Guidelines, Section 15126.4, require EIRs to describe feasible measures that can minimize significant adverse impacts. The following mitigation measures have been evaluated for feasibility and are incorporated in order to reduce potentially significant impacts related to increases in noise levels from demolition activities.

**MM NOISE-1:** During all project site excavation and grading on site, demolition contractors shall equip all equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturers' standards. All stationary equipment shall be placed so that emitted noise is directed away from the campus apartments nearest the project site.

**MM NOISE-2:** Equipment staging areas shall be located as far as feasible from the on-campus apartments.

**MM NOISE-3:** Haul truck deliveries shall be limited to the demolition hours. Haul routes shall not pass sensitive land uses, to the extent feasible.

**MM NOISE-4:** On-campus residents shall be notified, via postings on the project site, 24 hours before major demolition-related noise impacts commence.

### 4.6.6 Environmental Impacts After Mitigation Is Incorporated

Short-term demolition noise impacts to sensitive receivers located at the on-campus apartments west of the proposed project are potentially significant. However, incorporation of MM NOISE-1 through MM NOISE-4 is expected to reduce short-term noise impacts to **less than significant levels**.

### 4.6.7 References

14 CCR 15000–15387 and Appendices A–L. Guidelines for Implementation of the California Environmental Quality Act, as amended.

Caltrans (California Department of Transportation). 1998. *Technical Noise Supplement*. October 1998.

Caltrans. 2004. *Transportation- and Construction-Induced Vibration Guidance Manual*. June 2004.

City of Riverside. 2007a. *Riverside General Plan 2025*. November 2007.

City of Riverside. 2007b. *Riverside General Plan 2025 Final EIR*.

City of Riverside. 2007c. Riverside Municipal Code, Title 7 – Noise Control.

FTA (Federal Transit Administration). 2006. *Transit Noise and Vibration Impact Assessment*. May 2006.

LSA Associates, Inc. 2014. *Riverside Free Methodist Church Demolition -Traffic Analysis*, December 2014.

## **4.7 TRAFFIC**

The focus of the following discussion and analysis, based on the Initial Study (IS) and the Notice of Preparation (NOP) public comment period, concerns potentially adverse impacts to transportation and traffic as a result of implementation of the Riverside Free Methodist Church (RFMC) Demolition Project (proposed project). During the preparation of the IS, potential impacts related to air traffic patterns, hazardous design features, emergency access, and alternative transportation were found to be either less than significant or had no impact and are therefore not discussed further in this Draft Environmental Impact Report (DEIR). The following discussion summarizes the traffic impact analysis study for the proposed project that was completed by LSA Associates, Inc. (LSA) on December 12, 2014. The complete report is included as Appendix G of this EIR.

### **4.7.1 Setting**

#### **Existing Circulation Network**

##### ***Highways***

Directly south of the project is State Route (SR) 91, a primary connection between Riverside and Orange/Los Angeles Counties. SR 60 is located north of the project and connects Riverside in the east to downtown Los Angeles in the west and numerous communities in between. Interstate 215 (I-215) is located to the east of the project, stretching from Murrieta in the south to northern San Bernardino in the north. The SR-91/SR-60/I-215 Interchange is northeast of the project.

##### ***Street Network***

Diana Avenue is a two-lane local roadway that will provide access to the project site. It has a right-of-way width of 50 feet.

Adams Street is a four-lane arterial roadway with a right-of-way width of 110 feet in the section between Magnolia and Indiana Avenues. SR-91 exits onto Adams Street approximately 0.2 mile northeast of the project site. Adams Street intersects Diana Avenue.

##### ***Transit Service***

Transit service to the project area is provided by the Riverside Transit Agency (RTA). The proposed project is located within the California Baptist University Specific Plan (CBUSP) area. The RTA runs the Route 1 bus line on Magnolia Avenue from the University of California Riverside (UCR) to the West Corona Metrolink Station. This route services CBU directly and has many transfer points along the route, including the Galleria at Tyler Regional Shopping Center. RTA also runs Route 14 along Indiana Avenue, which parallels SR-91.

### **Existing Traffic Conditions**

#### ***Project Study Area***

The following study intersections and roadway segments were identified for evaluation.

#### Intersections:

1. Project Access and Diana Avenue;
2. Adams Street and Diana Avenue;
3. Adams Street and SR-91 Westbound; and
4. Adams Street and SR-91 Eastbound.

#### Roadway Segment:

1. Diana Avenue west of Adams Street.

Existing traffic volumes are based on a.m. (7:00 to 9:00) and p.m. (4:00 to 6:00) peak hour intersection turn movement counts obtained from Counts Unlimited in November 2014. In addition, daily traffic counts were collected on Diana Avenue, west of Adams Street. Count sheets are contained in Appendix G. Vehicle classification counts were conducted at the intersection at Adams Street/SR-91 Eastbound Ramps and Adams Street/SR-91 Westbound Ramps. To account for the presence of trucks, Passenger Car Equivalent (PCE) volumes were computed using a PCE factor of 2.0 for all trucks. The percentage of trucks at the remaining intersections on Adams Street was determined using classification counts at the intersection of Adams Street/SR-91 Westbound Ramps.

The average daily traffic on Diana Avenue, west of the Adams Street is 1,635 vehicles. Project traffic was added to existing traffic volumes to develop existing with project demolition traffic volumes.

### ***Methodology***

#### Signalized Intersections

The *Highway Capacity Manual* 2010 (HCM) published by the Transportation Research Board (TRB) establishes a system whereby highway facilities are rated for their ability to process traffic volumes. The terminology “Level of Service” (LOS) is used to provide a qualitative evaluation based on certain quantitative calculations, which are related to empirical values.

LOS for signalized intersections is defined in terms of average vehicle delay, which is a measure of driver discomfort, frustration, fuel consumption, and loss of travel time. Specifically, LOS criteria are stated in terms of the average control delay per vehicle for the peak 15-minute period within the hour analyzed. The average control delay includes initial deceleration delay, queue move-up time, and final acceleration time in addition to the stop delay. The criteria for the various LOS designations are summarized in Table 4.7-1.

**Table 4.7-1**  
**Level of Service Criteria for Signalized Intersections**

LOS	Control Delay Per Vehicle (seconds/vehicle)	Description
A	$\leq 10.0$	Operations with very low delay; most vehicles do not stop at all.
B	$> 10.0$ and $\leq 20.0$	Operations with good progression but with some restricted movement.
C	$> 20.0$ and $\leq 35.0$	Operations where a significant number of vehicles are stopping with some backup and light congestion.
D	$> 35.0$ and $\leq 55.0$	Operations where congestion is noticeable, longer delays occur, and many vehicles stop. The proportion of vehicles not stopping declines.
E	$> 55.0$ and $\leq 80.0$	Operations where there is significant delay, extensive queuing, and poor progression.
-F	$\geq 80.0$	Operations are unacceptable to most drivers, when the arrival rates exceed the capacity of the intersection.

Source: TRB 2010, Page 18-6, Exhibit 18-4.

### Unsignalized Intersections

The LOS for unsignalized intersections is determined by the computed or measured control delay and is defined for each minor movement. The LOS criteria for unsignalized intersections, as described in the 2010 HMC, are provided in Table 4.7-2.

**Table 4.7-2**  
**Level of Service Criteria for Unsignalized Intersections**

LOS by Volume to Capacity Ratio		Control Delay (sec/veh)
$v/c \leq 1.0$	$v/c > 1.0$	
A	F	0–10.0
B	F	$> 10.0$ –15.0
C	F	$> 15.0$ –25.0
D	F	$> 25.0$ –35.0
E	F	$> 35.0$ –50.0
-F	F	$> 50.0$

Source: TRB 2010, Page 19-2, Exhibit 19-1.

$v/c$  = volume to capacity ratio; sec/veh = seconds per vehicle

### Intersection Analysis

The analysis results for the existing conditions are shown in Table 4.7-3. Intersection LOS worksheets are provided in Appendix G. Review of Table 4.7-3 shows that, under the existing conditions, all study intersections would operate at LOS D or better during peak hours.

**Table 4.7-3**  
**Existing Intersection Operations**

Intersection	Control Type	Peak Hour	Existing Conditions	
			Delay	LOS
1. Project Access and Diana Avenue	Two-Way Stop	a.m.	7.6	A
		p.m.	8.9	A
2. Adams Street and Diana Avenue	Two-Way Stop	a.m.	16.4	C
		p.m.	15.3	C
3. Adams Street and SR-91 Westbound	Signal	a.m.	31.8	C
		p.m.	40.4	D
4. Adams Street and SR-91 Eastbound	Signal	a.m.	29.0	C
		p.m.	31.4	C

Source: LSA Associates, Inc. 2014 (see Appendix XXI).

LOS = Level of Service

For Two-Way Stop intersections, delay is for the worst-case movement.

### ***Roadway Segment Analysis***

The study roadway segment was analyzed according to the City of Riverside Traffic Impact Analysis Preparation Guide. The existing conditions analysis results and LOS for the study roadway segments are presented in Table 4.7-4. As this table depicts, Diana Avenue is currently operating at LOS A/B.

**Table 4.7-4**  
**Existing Conditions Roadway Operations**

Roadway Segment	Roadway Classification	LOS E Capacity	ADT	LOS
Diana Avenue: West of Adams Street	2-Lane Local	3,100	1,635	A/B

Source: LSA Associates, Inc. 2014; City of Riverside Traffic Impact Analysis

## 4.7.2 Related Regulations

### State

#### *Sustainable Communities Strategies: Senate Bill 375 – Land Use Planning*

Senate Bill (SB) 375 provides for a new planning process to coordinate land use planning and regional transportation plans and funding priorities in order to help California meet the greenhouse gas reduction goals established in Assembly Bill (AB) 32. SB 375 requires that regional transportation plans developed by metropolitan planning organizations relevant to the project site (e.g., Southern California Association of Governments [SCAG]) incorporate a “sustainable communities strategy” in their regional transportation plans that will achieve greenhouse gas emission reduction targets set by the California Air Resources Board. SB 375 also includes provisions for streamlined California Environmental Quality Act (CEQA) review for some infill projects, such as Transit-Oriented Developments. SB 375 is similar to the Regional Blueprint Planning Program established by Caltrans, which provides discretionary grants to fund regional transportation and land use plans voluntarily developed by metropolitan planning organizations working in cooperation with SCAG.

SCAG has engaged in a public involvement process for the development of its regional transportation plans and programs. As a metropolitan planning organization, SCAG is responsible for preparing and utilizing a public participation plan that is developed in consultation with all interested parties and provides reasonable opportunities for interested parties to comment on the content of SCAG’s proposed Regional Transportation Plan and the Regional Transportation Improvement Program. SB 375 requires SCAG to adopt a public participation plan for development of the sustainable communities strategy and an alternative planning strategy. Further, as required by SB 375, SCAG will conduct at least two informational meetings in each county within the region for members of the board of supervisors and city councils on the sustainable communities strategy and alternative planning strategy, if any. The purpose of the meetings shall be to present a draft of the sustainable communities strategy to members of the board of supervisors and city council members in that county and to solicit and consider their input and recommendations.

### Local

#### *County of Riverside Congestion Management Program*

The passage of Proposition 111 in June 1990 established a process for each metropolitan county in California that has an urbanized area with a population over 50,000 (which would include the County of Riverside) to prepare a Congestion Management Program (CMP). The CMP that was prepared by the Riverside County Transportation Commission (2011) in consultation with the

County and cities in Riverside County is an effort to more directly align land use, transportation, and air quality management efforts and to promote reasonable growth management programs that effectively use statewide transportation funds while ensuring that new development pays its fair share of needed transportation improvements. Additionally, the passage of Proposition 111 provided additional transportation funding through a \$0.09 per gallon increase in the State gas tax.

Although implementation of the CMP was made voluntary by the passage of AB 2419, the CMP requirement has been retained in all five urbanized counties within the SCAG region. In addition to their value as a transportation management tool, CMPs have been retained in these counties because of the Federal Congestion Management System requirement that applies to all large, urban areas that are not in attainment of Federal air quality standards. These counties recognize that the CMP provides a mechanism through which locally implemented programs can fulfill most aspects of a regional requirement that would otherwise have to be addressed by the regional agency (for the County of Riverside, SCAG).

The focus of the CMP is the development of an Enhanced Traffic Monitoring System in which real-time traffic count data can be accessed by the Riverside County Transportation Commission to evaluate the condition of the Congestion Management System, as well as meeting other monitoring requirements at the state and federal levels. Per the CMP-adopted LOS standard of E, when a Congestion Management System segment falls to F, a deficiency plan is required. Preparation of a deficiency plan would be the responsibility of the local agency where the deficiency is located. Other agencies identified as contributors to the deficiency would also be required to coordinate with the development of the plan. The plan must contain mitigation measures, including transportation demand management (TDM) strategies and transit alternatives, and a schedule of mitigating the deficiency. To ensure that the Congestion Management System is appropriately monitored to reduce the occurrence of CMP deficiencies, it is the responsibility of local agencies, when reviewing and approving development proposals, to consider the traffic impacts on the Congestion Management System.

#### ***City of Riverside General Plan 2025***

The Circulation and Community Mobility Element of the City of Riverside General Plan 2025 contains goals, recommendations, objectives, guidelines, and standards for the management of circulation and mobility in the City. The following General Plan policies are applicable to the proposed project and aim to minimize adverse conditions for traffic and transportation in the City.

**Policy CCM-2.2:** Balance the need for free traffic flow with economic realities and environmental and aesthetic considerations, such that streets are designed to handle normal traffic flows with tolerances to allow for potential short-term delays at peak flow hours.

**Policy CCM-2.3:** Maintain LOS D or better on Arterial Streets wherever possible. At key locations, such as City Arterials that are used by regional freeway bypass traffic and at heavily traveled freeway interchanges, allow LOS E at peak hours as the acceptable standard on a case-by-case basis.

**Policy CCM-2.4:** Minimize the occurrence of streets operating at LOS F by building out the planned street network and by integrating land use and transportation in accordance with the General Plan principles.

**Policy CCM-2.6:** Consider all alternatives for increasing street capacity before widening is recommended for streets within existing neighborhoods.

**Policy CCM-2.7:** Limit driveway and local street access on Arterial Streets to maintain a desired quality of traffic flow. Wherever possible, consolidate driveways and implement access controls during redevelopment of adjacent parcels.

**Policy CCM-2.8:** Design street improvements considering the effect on aesthetic character and livability of residential neighborhoods, along with traffic engineering criteria.

**Policy CCM-2.9:** Design all street improvement projects in a comprehensive fashion to include consideration of street trees, pedestrian walkways, bicycle lanes, equestrian pathways, signing, lighting, noise, and air quality wherever any of these factors are applicable (City of Riverside 2007a).

### ***City of Riverside Level of Service Standard***

The City of Riverside General Plan 2025, Circulation and Community Mobility Element (2007) allows LOS D to be used as the maximum acceptable threshold for the study intersections and roadways of Collector or higher classification. LOS C is to be maintained on all street intersections. However, at some key locations, such as City Arterial roadways that are used as freeway bypasses by regional through traffic and at heavily traveled freeway interchanges, LOS E may be acceptable as determined on a case-by-case basis. The City also recognizes that along key freeway-feeder segments during peak commute hours, LOS F may be expected due to regional travel patterns. A higher standard, such as LOS C or better, may be adopted for Local streets in residential areas.

A significant impact at a study intersection would occur when the addition of project-related trips either causes peak hour LOS to degrade from acceptable (LOS A through D) to unacceptable levels (LOS E or F) or causes the peak hour delay to increase as shown in Table 4.7-5.

**Table 4.7-5**  
**City of Riverside Intersection Level of Service Standards**

LOS	Increase in Delay
A / B	10.0 seconds
C	8.0 seconds
D	5.0 seconds
E	2.0 seconds
F	1.0 second

In order to determine the project-related impacts on the study area roadway segments, the roadway capacities shown in Table 4.7-6 are used.

**Table 4.7-6**  
**City of Riverside Roadway Capacity Standards**

Roadway Classification	Number of Lanes	Two-Way Traffic Volumes (ADT) <sup>a</sup>		
		LOS C	LOS D	LOS E
Local	2	2,500–2,799	2,800–3,099	3,100+
Collector (66 ft or 80 ft)	2	9,900–11,199	11,200–12,499	12,500+
Arterial <sup>b</sup>	2	14,400–16,199	16,200–17,999	18,000+
Arterial (88 ft)	4	16,800–19,399	19,400–21,199	22,000+
Arterial (100 ft)	4	26,200–29,599	29,600–32,999	33,000+
Arterial (120 ft)	6	38,700–44,099	44,100–49,499	49,500+
Arterial (144 ft)	8	50,600–57,799	57,800–64,999	65,000+

Source: City of Riverside 2012, Exhibit D.

ADT = average daily traffic

Notes: All capacity figures are based on optimum conditions and are intended as guidelines for planning purposes only.

<sup>a</sup> Maximum two-way ADT values are based on the 1999 Modified Highway Capacity Manual Level of Service Tables.

<sup>b</sup> Two-lane roadways designed as future Arterials that conform to Arterial design standards for vertical and horizontal alignments are analyzed as Arterials.

### 4.7.3 Thresholds of Significance

The following significance criteria are based on Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.), and will be used to determine the significance of potential traffic and circulation impacts. Impacts to traffic and circulation would be significant if the proposed project would:

- Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit.
- Conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways.
- Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.
- Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
- Result in inadequate emergency access.
- Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

#### **4.7.4 Project Elements That Can Reduce Impacts**

The project does not propose any design features that would reduce traffic impacts.

#### **4.7.5 Environmental Impacts Before Mitigation**

*Threshold: Would the project conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?*

##### **Trip Distribution**

The proposed project is limited to the demolition of existing on-site buildings and will last approximately 28 workdays over period of two to three months. Project activities include site clearing, building removal, and rough grading. Therefore, analysis of impacts to the circulation system is limited to the effects of construction vehicle traffic.

Construction vehicles will access the project site via an existing driveway located on Diana Avenue. Currently, the driveway and parking area are used by the church. However, existing traffic volumes at the project driveway are nominal during the weekday a.m. and p.m. peak hours. During demolition, two types of construction traffic would be generated: employee trips

## 4.7 – TRAFFIC

and construction vehicle trips (e.g., material deliveries and construction waste hauling). Demolition activities would generate trips throughout the day, but because the project does not require intense grading/off-site hauling, the majority of the trips would be associated with construction workers traveling to and from the site during the peak hours.

Based on information from CBU, six employees will be on site daily and the following vehicles will travel to and from the project site on a daily basis:

- One Diesel Service Truck;
- One Diesel Forman Truck;
- One Diesel Operator Truck; and
- Two Semi-End Dump Trucks.

Table 4.7-7 summarizes number of trips anticipated to occur during the demolition of the existing church complex. Additionally, some demolition vehicles will be used daily on site only and stored at designated staging areas and, therefore, would not contribute to daily traffic. These vehicles include one diesel bobcat, one diesel excavator (100,000 pound), and one diesel track loader.

**Table 4.7-7  
Construction Vehicle Trip Generation**

Description	Quantity	Round Trips	Type	PCE	Vehicle Trip Generation Rates						
					ADT	AM Peak Hour			PM Peak Hour		
						In	Out	Total	In	Out	Total
Workers	6	1	Passenger	1	12	6	0	6	0	6	6
Diesel Semi End Dump Truck	2	12	Large Truck	2	9	1	1	2	1	1	2
Diesel Service Truck	1	2	Medium Truck	2	4	0	0	0	0	0	0
Diesel Foreman Truck	1	2	Medium truck	2	4	0	0	0	0	0	0
Diesel Operator Truck	1	2	Medium Truck	2	4	0	0	0	0	0	0

Notes: It is estimated that 10 percent of dump truck trips would occur during the peak hours.

ADT = average daily traffic

Table 4.7-7 shows the expected trip generation resulting from demolition activities and shows that, during demolition of the existing church complex, a total of 72 daily trips would occur with eight trips occurring in the a.m. peak hour and eight trips occurring during the in the p.m. peak hour. Since existing traffic volumes at the project driveway are nominal during the a.m. and p.m.

peak hours, they were not subtracted from the project trip generation and are included in existing with project analysis as a conservative approach.

Because large trucks utilize more roadway capacity than passenger vehicles due to their larger size, slower start-up times, and reduced maneuverability, a passenger car equivalent (PCE) factor was used. A PCE factor is defined as the impact a particular kind of vehicle has on traffic variables such as headway, speed, density compared to a single passenger car. These factors are applied to the truck trip generation to account for the difference in operational characteristics of heavy vehicles. To determine the PCE for the various types of trucks that would be used during demolition activities of the project, LSA used adjustment factors contained in Highway Capacity Manual (HCM). The HCM recommends PCE conversion factors ranging from 1.0 to 2.0 depending on the size of the truck. To present a conservative analysis, LSA used a PCE conversion factor of 2.0. After accounting for trucks, demolition of the existing church complex would generate a total of 132 daily PCE trips, with 10 PCE trips occurring during the p.m. peak hour and 10 PCE trips occurring during the p.m. peak hour. Table 4.7-8 illustrates PCE Trip Generation Rates.

**Table 4.7-8  
Construction Passenger Car Equivalent (PCE) Generation**

Description	Quantity	Round Trips	Type	PCE	Vehicle Trip Generation Rates						
					ADT	AM Peak Hour			PM Peak Hour		
						In	Out	Total	In	Out	Total
Workers	6	1	Passenger	1	12	6	0	6	0	6	6
Diesel Semi End Dump Truck	2	12	Large Truck	2	96	2	2	4	2	2	4
Diesel Service Truck	1	2	Medium Truck	2	8	0	0	0	0	0	0
Diesel Foreman Truck	1	2	Medium truck	2	8	0	0	0	0	0	0
Diesel Operator Truck	1	2	Medium Truck	2	8	0	0	0	0	0	0

Notes: It is estimated that 10 percent of dump truck trips would occur during the peak hours.

ADT = average daily traffic

Generalized trip distribution patterns for the project are based on proposed haul routes to and from the demolition debris destination. For the purposes of this analysis, all project trips would travel to SR-91 via Diana Avenue and Adams Street. Appendix G of this EIR includes trip distribution figures.

### Existing Plus Project Traffic

A roadway and intersection LOS analysis was conducted for existing conditions. Consistent with City's Traffic Impact Analysis (TIA) Preparation Guide, dated August 2012, the 2010 *Highway Capacity Manual* (HCM 2010) analysis methodologies were used to determine intersection levels of service for all study area intersections. All levels of service were calculated using Synchro 8.0 software, which uses the HCM 2010 methodologies. As stated in the City's TIA preparation guide, for projects in conformance with the City's General Plan, the City strives to maintain LOS D at roadways and intersections. Based on the City's TIA guidelines, a significant project impact occurs when the project causes a roadway LOS fall to below D. For intersections, a significant impact occurs at a study intersection when the peak hour LOS falls below C or D per Policy CCM-2.3 of the City's TIA Preparation Guide.

### Intersection Analysis

Intersections where construction vehicles have the potential to create a circulation impact were selected for analysis. The study intersections were previously listed on page 4.7-2. LOS worksheets are included in Appendix G. As Table 4.7-9 shows, all study intersections analyzed in this operate at a satisfactory LOS under existing and existing with project conditions. Therefore, project traffic impacts at intersections are considered less than significant and no mitigation is required.

**Table 4.7-9**  
**Existing Plus Project Intersection Operations**

Intersection	Peak Hour	Existing Conditions		Existing Plus Construction Conditions		Difference in Delay	Exceed Threshold?
		Delay	LOS	Delay	LOS		
1. Project Access and Diana Avenue	a.m.	7.6	A	10.4	B	2.8	No
	p.m.	8.9	A	10.0	B	1.1	No
2. Adams Street and Diana Avenue	a.m.	16.4	C	16.4	C	0.0	No
	p.m.	15.3	C	15.5	C	0.2	No
3. Adams Street and SR-91 Westbound	a.m.	31.8	C	32.1	C	0.3	No
	p.m.	40.4	D	40.5	D	0.1	No
4. Adams Street and SR-91 Eastbound	a.m.	29.0	C	29.1	C	0.1	No
	p.m.	31.4	C	31.7	C	0.3	No

Source: LSA Associates, Inc. 2014 (see Appendix G).

LOS = Level of Service

For Two-Way Stop intersections, delay is for the worst-case movement.

### *Roadway Segment Analysis*

During demolition of the existing church complex, daily traffic volumes on Diana Avenue would increase to 1,767 vehicles as demolition activities would add a total of 132 daily PCE trips. Existing and Existing Plus Project conditions are depicted in Table 4.7-10. Based on the City's TIA Preparation Guide, a local roadway with average daily traffic volumes less than 2,500 vehicles operates at LOS A or B. Therefore, Diana Avenue operates at a satisfactory LOS under existing and existing with project conditions. Impacts to roadway segments are considered **less than significant** and no mitigation is required.

**Table 4.7-10**  
**Existing Plus Project Roadway Operations**

Roadway Segment	Existing Roadway Classification	LOS E Capacity	Existing		Existing Plus Phase I		Exceed Threshold?
			ADT	LOS	ADT	LOS	
Diana Avenue: West of Adams Street	2-Lane Local	3,100	1,635	A/B	1,767	A/B	No

Source: LSA Associates, Inc. 2014

### **Future Conditions**

The proposed project only consists of activities related to the demolition of three existing on-site buildings. The proposed project site lies within the CBUSP and is designated as Mixed Use/Urban under the CBUSP. In 2013, the City of Riverside adopted a Mitigated Negative Declaration (MND) in conjunction with the CBUSP. The MND evaluated potential impacts within the CBUSP project area, including those related to traffic. The technical, economic, and environmental characteristics evaluated in the MND remain relevant to the proposed project with the exception of an impact upon a cultural resource. Although the church facility is included in the CBUSP, the demolition of the church facility was not analyzed in the MND since CBU did not own the property at the time the MND was adopted.

Traffic impacts associated with development of the CBUSP have already been addressed by the CBUSP MND. Therefore, any future development at the project site will result in circulation impacts that are either less than significant or less than significant with mitigation incorporated. In addition, no construction projects are planned to occur in the immediate vicinity during the project; therefore, cumulative impacts are considered **less than significant** and no mitigation is required.

***Threshold: Would the project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other***

*standards established by the county congestion management agency for designated roads or highways?*

The County of Riverside CMP has an adopted LOS standard of E. As described in the previous question, all project study area roadway segments and intersections will operate at LOS D and above with project implementation. Therefore, the project will not conflict with the CMP. All future build out impacts related to future use of the project site have been addressed in the CBUSP MND. As a result, impacts are **less than significant** and no mitigation is required.

### 4.7.6 Mitigation Measures

Section 15126.4 of the CEQA Guidelines requires EIRs to describe feasible measures that can minimize significant adverse impacts. The proposed project will have no significant adverse impacts to traffic. Therefore, no mitigation is required.

### 4.7.7 References

14 CCR 15000–15387 and Appendices A–L. Guidelines for Implementation of the California Environmental Quality Act (CEQA), as amended.

California Baptist University Specific Plan, March 2013. City of Riverside.

City of Riverside. 2007a. *City of Riverside General Plan 2025*. Adopted November 2007.

City of Riverside. 2012a. *City of Riverside General Plan 2025, Circulation and Community Mobility Element*. Adopted November 2007; amended November 2012. [http://www.riversideca.gov/planning/gp2025program/GP/05\\_Circulation\\_and\\_Community\\_Mobility\\_Element.pdf](http://www.riversideca.gov/planning/gp2025program/GP/05_Circulation_and_Community_Mobility_Element.pdf).

City of Riverside. 2012b. *Traffic Impact Analysis Preparation Guide*. City of Riverside Public Works Department. <http://www.riversideca.gov/traffic/pdf/traffic-impact-analysis.pdf>.

LSA Associates Inc. 2014. *Riverside Free Methodist Church Demolition - Traffic Analysis*. December 2014.

Riverside County Transportation Commission. 2011. *Riverside County Congestion Management Program*. December 14, 2011. [http://www.rctc.org/uploads/media\\_items/congestionmanagementprogram.original.pdf](http://www.rctc.org/uploads/media_items/congestionmanagementprogram.original.pdf).

TRB (Transportation Research Board). 2010. *Highway Capacity Manual 2010*. Fifth ed. TRB of the National Academies. <http://hcm.trb.org/>.

## CHAPTER 5.0 MANDATORY CEQA TOPICS

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### 5.1 INTRODUCTION

California Environmental Quality Act (CEQA) Guidelines Section 15126 requires environmental impact reports (EIRs) to include a discussion of (1) the significant environmental effects of a project, (2) the unavoidable significant environmental effects if the project is implemented, (3) any irreversible changes should the project be implemented, and (4) growth-inducing impacts (14 CCR 15000 et seq.).

The following is a guide to where most of these issues are discussed in this document:

- Significant Environmental Effects – throughout Chapter 4.0.
- Mitigation Measures – Executive Summary and throughout Chapter 4.0.
- Alternatives – Chapter 7.0.
- Growth-Inducing Impacts – Chapter 8.0.

Therefore, since the above issues are discussed in other sections of this document, this chapter will only address the Riverside Free Methodist Church Demolition Project's (proposed project's) significant unavoidable and irreversible impacts.

#### 5.1.1 Significant Unavoidable Environmental Effects

CEQA Guidelines Section 15126.2(b) further directs EIRs to address impacts from a project that will result in significant impacts, including those that cannot be mitigated below a level of significance. A summary of all the environmental issue areas and the resultant significance and listing of mitigation measures is found in the Executive Summary of this document. To summarize, the following issue area will result in a **significant impact** even after mitigation measures have been incorporated, thus resulting in an unavoidable impact:

- **Cultural Resources.** The Riverside Free Methodist Church (RFMC) is eligible for Structure of Merit status and, based on this, the City of Riverside has interpreted that the property qualifies as a historic resource. The contributors to the historic resource include the RFMC Sanctuary and Fellowship Hall. The proposed project involves on-site building demolition and vegetation removal. Under CEQA, the demolition of a historic resource cannot be mitigated to a level of less than significant. Although mitigation measures have been imposed, none can reduce these impacts to less than significant levels.

### 5.1.2 Significant Irreversible Changes

CEQA Guidelines mandate that the EIR must address any significant irreversible environmental changes that would be involved in the proposed action should it be implemented (14 CCR 15126(c)). An impact would fall into this category if:

- The project would involve a large commitment of nonrenewable resources;
- The primary and secondary impacts of the project would generally commit future generations of people to similar uses;
- The project involves uses in which irreversible damage could result from any potential environmental incidents associated with the project; and
- The proposed consumption of resources is not justified (e.g., the project results in wasteful use of energy).

Determining whether the project may result in significant irreversible effects requires a determination of whether key resources would be degraded or destroyed in such a way that there would be little possibility of restoring them. Project demolition activities would result in the use of nonrenewable resources and energy sources, including fossil fuels. Fossil fuels would be used to power demolition equipment, as well as delivery and demolition employee vehicles. Use of these energy sources would be considered a permanent commitment of resources. However, the project has no operational component; therefore, a long-term permanent commitment of nonrenewable energy sources would not occur. The proposed project's energy consumption would be relatively minor compared to other local and regional projects. Therefore, this would not be considered a significant irreversible environmental effect.

## **CHAPTER 6.0**

### **CUMULATIVE IMPACT ANALYSIS**

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#### **6.1 INTRODUCTION**

The California Environmental Quality Act (CEQA) requires that an environmental impact report (EIR) examine the cumulative impacts associated with a project, in addition to project-specific impacts. The discussion of cumulative impacts must reflect the severity of the impacts and the likelihood of their occurrence; however, the discussion need not be as detailed as the discussion of environmental impacts attributable to the project alone (14 CCR 15130(b)).

As stated in the CEQA Guidelines, an EIR “shall discuss cumulative impacts of a project when the project’s incremental effect is cumulatively considerable (Section 15130(a)).” “Cumulatively considerable” means that “the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects as defined in Section 15130 (Section 15065(c)).” Section 15355 states that cumulative impacts occur from “the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.”

A cumulative impact is not considered significant if the impact can be mitigated to below the level of significance through mitigation, including providing improvements and/or contributing funds through fee-payment programs. The EIR must examine “reasonable options for mitigating or avoiding any significant cumulative effects of a proposed project” (Sections 15130(a)(3) and 15130(b)(5)).

#### **6.2 CUMULATIVE ANALYSIS SETTING**

The cumulative impact analysis for the Riverside Free Methodist Church Demolition Project (proposed project) is based on information contained in the City of Riverside (City) General Plan (GP) 2025 (City of Riverside 2007a), the Final Program EIR for the City of Riverside General Plan (Final GP EIR; City of Riverside 2007b), and the California Baptist University Specific Plan MND (CBUSP MND) since the site is located in the CBUSP area, in the City, and within the County of Riverside. All four of these documents are incorporated in this chapter by reference.

### 6.3 CUMULATIVE FORECASTING METHODOLOGY

Section 15130(b)(1)(A) of the CEQA Guidelines allows for the preparation of a list of past, present, and reasonably anticipated future projects as a viable method of determining cumulative impacts. This discussion uses the following approach: an initial list and description of all related projects is presented, followed by a discussion of the effects that the proposed project may have on each environmental category of concern, such as traffic or noise. Consistent with CEQA (California Public Resources Code, Section 21000 et seq.), this discussion is guided by the standards of practicality and reasonableness.

#### 6.3.1 Related Projects

This section of the analysis provides a list of past, present, and reasonably foreseeable future projects that the City determined were most relevant to the proposed project. Several development proposals and City projects in proximity to the proposed project have been submitted for consideration or have been recently approved that together with the proposed project would result in an increase in construction-related environmental impacts. Table 6.0-1 presents the development proposals within a 0.25-mile radius of the project site.

**Table 6.0-1  
Cumulative Projects**

No.	Cumulative Project	Location/Address	Description
1.	Relocate Historic Single-Family Residence	3690 Adams Street and 2909 Lime Street	Historic Residence move and restoration
2.	Church	8223 California Avenue	Reestablish church and school
3.	Student Housing	3622 Adams Street	Convert apartments into student housing for California Baptist University
4.	Gas Station	3399 Adams Street	Gas station, convenience store, car wash
5.	Magnolia Avenue Specific Plan rezoning	3683 Adams Street	Rezoning property from Single Family Residential to Mixed Use Neighborhood Zone in the Magnolia Avenue Specific Plan; Design Review for conversion of an existing single-family residence into a live/work unit
6.	Vehicle Service Expansion	8069 Indiana Avenue	Construction of 7,373-square foot addition to facilitate vehicle service and parts sales; Singh Subaru; vacation of Susan Street between Indiana Ave & SR-91
7.	Magnolia Avenue Specific Plan Vacation	Magnolia Ave adjacent to Palm Shadows Apartments (3697 Monroe St) between Adams and Monroe Streets	Summary vacation to vacate an excess right-of-way along Magnolia Avenue in the Magnolia Avenue Specific Plan

**Table 6.0-1  
Cumulative Projects**

No.	Cumulative Project	Location/Address	Description
8.	Check Cashing Facility	3501 Adams Street	Rezoning property from Office to Commercial Retail; Conditional Use Permit to allow Check Cashing facility
9.	School of Business	8432 Magnolia Avenue	Conditional use permit and design review for California Baptist University to facilitate the construction of a 42½-foot tall, 2-story building (School of Business) in the Magnolia Avenue Specific Plan
10.	Senior Housing Complex	8537 Magnolia Avenue	Conditional Use Permit to convert an existing independent senior housing complex to an assisted living facility for seniors within Magnolia Avenue Specific Plan
11	Adams Plaza	3520 Adams Street	Conditional Use Permit and Design Review for California Baptist University to facilitate the first phase renovation of the existing Adams (Lancer) Plaza for the construction of 2-story, 48-foot tall Student Recreation Center toward the rear (west) portion of the complex in the Magnolia Avenue Specific Plan
12.	Magnolia Avenue Specific Plan Parking	3747 Monroe Avenue	Conditional use permit and Certificate of Appropriateness for California Baptist University to construct a new 317-space parking lot and associated improvements. In addition, design improvement to the Hawthorne House and the surrounding landscape. Project site is located in the Magnolia Avenue Specific Plan Overlay Zones
13.	Student Services Complex	3580 Adams Street	Conditional use permit; California Baptist University student services complex; rehabilitate existing retail space

Source: City of Riverside, Master Cumulative Project List.

CR-SP = Commercial Retail-Specific Plan

## 6.4 ASSESSMENT OF CUMULATIVE IMPACTS

### 6.4.1 Air Quality

In analyzing cumulative impacts from the proposed project, the assessment must specifically evaluate a project's contribution to the cumulative increase in pollutants for which the South Coast Air Basin (Basin) is designated as nonattainment for the National Ambient Air Quality Standards (NAAQS) or California Ambient Air Quality Standards (CAAQS). The location of the project is within a nonattainment area for O<sub>3</sub>, NO<sub>2</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>, and NO<sub>2</sub>. Implementation of the

project would result in short-term impacts to air quality associated with transportation and use of heavy equipment during demolition activities.

The proposed project will consist of site clearing, building removal, and rough grading and will take approximately two to three months. The proposed project is anticipated to occur in the latter half of 2015. Air pollutant emissions associated with construction activity of future projects would be reduced through the implementation of control measures required by the South Coast Air Quality Management District (SCAQMD). Cumulative particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>) emissions would be reduced because all future projects would be subject to SCAQMD Rule 403 (Fugitive Dust), which sets forth general and specific requirements for all construction sites in the SCAQMD.

The project's emissions of nonattainment pollutants in the Basin are all below thresholds set by the SCAQMD. Currently, no projects have been identified in the vicinity of the proposed project that would occur simultaneously and as a result contribute to a cumulative air quality impact. If the event that a future project in the vicinity had a similar construction schedule to that of the proposed project, the projects' combined emissions would incrementally contribute to the Basin's levels of ozone (O<sub>3</sub>), nitrogen dioxide (NO<sub>2</sub>), CO, PM<sub>10</sub>, and PM<sub>2.5</sub>. However, since the proposed project's emissions are all well below SCAQMD thresholds, its potential to contribute to cumulatively impact is considered low. Therefore, cumulative impacts would be **less than significant** and no mitigation is required.

With regard to cumulative impacts associated with nonattainment pollutants, in general, if a project is consistent with applicable community and general plans, it has been accounted for in the attainment demonstration contained within the State Implementation Plan and would therefore not cause a cumulatively significant impact on the ambient air quality. The project site is designated CBUSP and CBU SP – Mixed Use/Urban in the City GP 2025 and Municipal Code, Zoning (City of Riverside 2007a, 2007c), respectively. The site is currently developed with the Riverside Free Methodist Church sanctuary, fellowship hall, and education building. The proposed project would be consistent with the CBUSP and CBU SP – Mixed Use/Urban as it would aid in the implementation of planned uses under the CBUSP. As the CBUSP was found to be compliant with the City GP 2025 in the CBUSP MND, the proposed project is also considered to be consistent with the development envisioned in the City GP 2025. Since the proposed project does not involve a permanent increase in employment or vehicle trips, it would be consistent with the Southern California Association of Governments (SCAG) growth projections anticipated in SCAQMD's 2012 Air Quality Master Plan (AQMP). In addition, demolition emissions would not result in the significant emissions of any criteria air pollutants. As a result, implementation of the proposed project would result in a **less than significant** cumulative impact to air quality.

### 6.4.2 Biological Resources

The proposed project site contains approximately 10 percent vegetated cover consisting of ornamental trees, shrubs, and grass. No native vegetation remains on the project site. Four species of birds were observed during the site visit, as described in Section 4.2 of this EIR. Overall wildlife abundance and species richness appear to be low because of the urbanized nature of the project site and surrounding area.

As a result of the biological evaluation conducted on the site (Appendix C), there were no species identified as a candidate, sensitive, or special-status species identified on the project site. However, because nesting birds are protected by the Migratory Bird Treaty Act, and since no nesting bird survey was conducted as part of the biological evaluation, there is potential for nesting birds to be present in the ornamental landscaping during implementation of the proposed project. Common native urban bird species that may nest in ornamental landscaping and species that may choose to nest on bare ground within the project site are described in Section 4.2 of this document. The mitigation proposed to minimize adverse impacts to these species requires that a qualified biologist conduct a nesting bird survey within 30 days prior to ground-disturbing activities.

Projects surrounding the RFMC site could also provide habitat for the same species. The combined construction of projects within the vicinity could deprive the affected species of a significant amount of habitable space. However, it is anticipated that species that are potentially affected by related projects would also be subject to the same requirements of CEQA as the proposed project. These determinations would be made on a case-by-case basis and the effects of cumulative development on nesting birds would be mitigated to the extent feasible in accordance with CEQA and other applicable legal requirements. Additionally, as discussed in Section 4.2, the project is consistent with the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). Consistency with the MSHCP results in the ability of the project to rely on the MSHCP for mitigation related to cumulative biological impacts. Therefore, cumulative adverse effects on species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service would be **less than significant**.

### 6.4.3 Cultural Resources

The RFMC is considered eligible as a local Structure of Merit, which qualifies it as historical resource in the City of Riverside. Contributors to the historic resource include the church sanctuary and the church fellowship hall. Demolition activities would result in a significant and unavoidable impact to this historic resource. Off-site structures were not considered for this

analysis because the project only consists of demolition activities and would not affect off-site structures.

Cumulative impacts on cultural resources evaluate whether impacts of the proposed project and related projects, when taken as a whole, substantially diminish the number of historic or archeological resources within the same or similar context or property type. However, impacts to cultural resources tend to be site-specific. The historic resource on the site is not part of an existing or known grouping or district of other historic resources that are proposed to be affected as part of the cumulative impacts of other projects in the area. In addition, there are no other known projects currently within the City of Riverside that propose to demolish a designated or eligible historic building. It is anticipated that if cultural resources were potentially affected by related projects they would also be subject to the same requirements of CEQA as the proposed project and mitigate for their impacts, if applicable. These determinations would be made on a case-by-case basis and the effects of cumulative development on historic resources would be mitigated to the extent feasible in accordance with CEQA and other applicable legal requirements. Therefore, the proposed project would not contribute to any potential cumulative impacts, and cumulative impacts on cultural resources would be **less than significant**.

### 6.4.4 Greenhouse Gas Emissions

The SCAQMD has not adopted recommended numeric CEQA significance thresholds for greenhouse gas (GHG) emissions for lead agencies to use in assessing GHG impacts of development projects. However, the California Natural Resources Agency adopted amendments to the CEQA Guidelines on December 30, 2009, which became effective on March 18, 2010.

While the proposed project would result in emissions of GHGs during demolition activities, no guidance exists to indicate what level of GHG emissions would be considered substantial enough to result in a significant adverse impact on global climate. However, it is generally the case that an individual project is of insufficient magnitude by itself to influence climate change or result in a substantial contribution to the global GHG inventory. Thus, GHG impacts are recognized as exclusively cumulative impacts; there are no non-cumulative GHG emission impacts from a climate change perspective (CAPCOA 2008).

The proposed project would result in an incremental increase in GHG emissions relative to existing conditions. The proposed project would incorporate project design features that would divert demolition waste from landfills. In addition, several statewide GHG reduction measures would reduce GHG emissions associated with motor vehicles and electrical generation over time. The benefits of these measures are compared to the GHG emissions that would be generated under a business-as-usual scenario.

Under CEQA, a project would have a significant cumulative impact caused by the combined impact of past, present, and probable future projects if its incremental impact represents a “cumulatively considerable” contribution to such cumulative impacts (14 CCR 15064(h)). So long as levels of GHG emissions in the atmosphere are generally at levels that create adverse impacts (i.e., climate change), the emissions of a particular project, even if not significant in terms of thresholds, may nonetheless contribute to an adverse, unavoidable impact because other projects do not meet such standards. The degree to which a project’s contribution to a cumulative impact is considered cumulatively considerable is necessarily relative in terms of the size and impacts of a project or development. Given the relatively small size of the project and the fact that it would not generate long-term GHG emissions, the project’s cumulative contribution to climate change is considered **less than significant**.

#### 6.4.5 Hazards and Hazardous Materials

Risks associated with hazardous materials are generally site-specific and localized, and are thus limited to the project site. Converse Consultants conducted a Phase 1 Environmental Site Assessment (ESA) in June 2014 (Appendix E) to review the history of the site for any indication of on-site historical or current uses that would have affected the soil or groundwater with hazardous materials. The ESA found no evidence of present or potential recognized environmental concerns. The only chemicals stored on site are those used for routine facility maintenance. While off-site hazardous materials sites are located within a mile of the project site, their potential to affect the project site is considered low.

However, the site does have potential for environmental concerns that were outside the scope of the Phase 1 ESA. These include lead-based paint (LBP) and asbestos-containing materials (ACM). LBP can be found in structures built prior to 1978. Prior to the 1970s, asbestos was incorporated into various construction components including floor tiles and thermal insulation. The church facility and fellowship hall at the site were built in 1963–64, while the educational building was constructed later, in 1979. Due the age of the church and fellowship hall, there exists a potential significant hazard related to exposure of workers and the public to LBP and ACM during demolition activities.

Per Mitigation Measure HAZ-1 all asbestos and lead-based paint materials would be identified and remediated per the requirements identified by the County of Riverside Department of Environmental Health (DEH). Similarly, all cumulative projects would be expected to comply with Federal, State, and local statutes and regulations applicable to hazardous materials. Implementation of the proposed project will not, therefore, create a cumulative impact related to exposing the public to hazardous materials. For these reasons, cumulative impacts to the public or environment resulting from the accidental release of hazardous materials would be **less than significant**.

### 6.4.6 Noise

On-site noise-generating activities associated with the project would include short-term demolition activities, site clearing, and rough grading (development activities). Equipment anticipated for project development includes only standard equipment that would be employed for any routine project of this scale. Demolition hours would be limited to the hours as allowed per the City's Noise Ordinance (City of Riverside 2007d). As discussed in Chapter 4.6 this EIR, activities associated with demolition of existing structures would exceed City Noise Ordinance standards and have the potential to adversely affect adjacent noise-sensitive uses. However, these impacts could be mitigated to level that is less than significant through implementation of Mitigation Measures (MM) Noise-1 through Noise-4. No construction projects are proposed in the vicinity of the project that would occur simultaneously. The project has no operational component and therefore cannot contribute to cumulatively considerable operational noise impact. As a result, cumulative noise impacts would be considered **less than significant**.

Demolition and rough grading activities due to the proposed project are not likely to expose people to an excessive generation of groundborne vibration. With the anticipated equipment described in Section 4.6, vibration levels from construction equipment and activities, including bulldozers, trucks, and jackhammers, would be less than 0.1 inch per second (inch/sec) at 25 feet from the project demolition area and lower than the peak particle velocity (PPV) of 0.2 inch/sec vibration damage criteria at the nearest commercial/retail buildings for nonengineered timber and masonry buildings (FTA 2006). For new commercial/residential buildings, the vibration damage potential threshold recommended by Caltrans is 1 inch/sec from transient sources such as pile driving and blasting. Caltrans also states that it takes at least 0.9 inch/sec of PPV for the human response to be strongly perceptible, or 0.25 inch/sec to be distinctly perceptible (Caltrans 1992). The nearest sensitive uses/buildings are approximately 85 feet from the project demolition area, and no commercial buildings are within 50 feet of the project demolition area. None of the predicted vibration levels (all below 0.1 inch/sec) for sensitive uses in the vicinity of the project site would reach either of these two threshold levels. Thus, no significant vibration impacts are anticipated and no mitigation is required.

Other foreseeable construction projects within the vicinity of the CBU campus would not be close enough to create a combined excessive generation of groundborne vibrations. Therefore, cumulative impacts associated with excessive groundborne vibrations would be **less than significant**.

### 6.4.7 Traffic

The Traffic Impact Analysis prepared for proposed project did not identify any cumulative construction projects that would occur at the same time as proposed project. The proposed

project is expected to generated a total of 72 daily trips with eight trips occurring in the a.m. peak hour and eight trips occurring during the in the p.m. peak hour. These trips would occur during the approximately 28 workdays planned for the project, which would be distributed over a period of two to three months. A temporary increase in traffic during demolition would occur and all project area intersections and roadways would continue to operate at a satisfactory level of service. Since the project is limited to the short-term demolition of existing structures on site, it would have no long-term contribution to cumulative traffic impacts. Traffic impacts associated with development of the CBUSP have already been addressed by the CBUSP MND. Therefore, any future development at the project site will result in circulation impacts that are either less than significant or less than significant with mitigation incorporated. As a result, all cumulative traffic impacts related to the proposed project are considered **less than significant**.

## 6.5 REFERENCES

14 CCR 15000–15387 and Appendices A–L. Guidelines for Implementation of the California Environmental Quality Act, as amended.

California Public Resources Code, Sections 21000–21177. California Environmental Quality Act (CEQA), as amended.

Caltrans (California Department of Transportation). 2004. *Transportation- and Construction- Induced Vibration Guidance Manual*. June 2004.

CAPCOA (California Air Pollution Control Officers Association). 2008. CEQA & Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act. January 2008.

City of Riverside. 2007a. *City of Riverside General Plan 2025*. Adopted November 2007. Riverside, California: City of Riverside Community Development Department.

City of Riverside. 2007b. *Final Program Environmental Impact Report for the City of Riverside General Plan*. Adopted November 2007. Riverside, California: City of Riverside Community Development Department.

City of Riverside. 2007c. Riverside Municipal Code: Title 19 – Zoning. <http://www.riversideca.gov/municode/pdf/19/title-19-full-copy.pdf>.

City of Riverside. 2007d. Riverside Municipal Code: Title 7 – Noise Control.

David Leonard Associates. n.d. *California Baptist University Specific Plan*.

## 6.0 – CUMULATIVE IMPACT ANALYSIS

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LSA Associates, Inc. 2014. *Riverside Free Methodist Church Demolition Project Traffic Impact Analysis*. December 2014.

SCAQMD (South Coast Air Quality Management District). 2012. *2012 Air Quality Management Plan*. Adopted December 7, 2012. <http://www.aqmd.gov/aqmp/2012aqmp/index.htm>.

## **CHAPTER 7.0 PROJECT ALTERNATIVES**

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### **7.1 INTRODUCTION**

Pursuant to the California Environmental Quality Act (CEQA) Guidelines, environmental impact reports (EIRs) are required to “describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives” (Section 15126.6(a)). The EIR “must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation” (Section 15126.6(a)). This alternatives discussion is required even if these alternatives “would impede to some degree the attainment of the project objectives, or would be more costly” (Section 15126.6(b)).

The inclusion of an alternative in an EIR does not constitute definitive evidence that the alternative is in fact “feasible.” The final decision regarding the feasibility of alternatives lies with the decision-maker for a given project, who must make the necessary findings addressing the potential feasibility of an alternative, including whether it meets most of the basic project objectives or reduces the severity of significant environmental effects per CEQA (California Public Resources Code, Section 21081; see also Guidelines Section 15091).

### **7.2 PROJECT OBJECTIVES**

In developing the alternatives to be addressed in this chapter, consideration was given to the ability to meet the basic objectives of the Riverside Free Methodist Church (RFMC) Demolition Project (proposed project) and eliminate or substantially reduce the identified significant environmental impact. As stated in Chapter 2.0 of this Draft EIR, the project objectives against which the alternatives were analyzed include the following:

- Prepare a site in order to maximize future use by CBU, in accordance with the approved CBU Specific Plan.
- Accommodate future growth of the CBU campus.
- Remove an on-site septic system to enhance the use of the property and to facilitate a future sewer connection.

Pursuant to the guidelines stated above, as well as the project objectives, a range of alternatives to the proposed project is considered and evaluated in this DEIR. These alternatives were developed by the City of Riverside (City) in the course of project planning, environmental

review, and public input. In order to summarize these project alternatives, as suggested in CEQA Section 15126.6(d), a matrix has been prepared to summarize and compare the impacts of each project alternative (see Table 7.0-4, Comparison of Alternatives).

### 7.3 ALTERNATIVES UNDER CONSIDERATION

This section discusses three alternatives to the proposed project, including the No Project (No Build) Alternative. The No Project Alternative, which is a required element of an EIR pursuant to Section 15126.6(e) of the CEQA Guidelines, examines the environmental effects that would occur if the project were not to proceed. The other alternatives are discussed as part of the “reasonable range of alternatives” selected by the lead agency. The alternatives addressed in this section are listed below, followed by a more detailed discussion of each:

- No Project Alternative – Continued RFMC or Other Church Use.
- Alternative 1 – Adaptive Reuse.
- Alternative 2 – Relocation.

Due to unique considerations under the proposed project, the analysis that follows limits the scope of alternatives to short-term, construction-related, impacts. Section 15126.6(f) of the CEQA Guidelines states that there is no ironclad rule governing the nature and scope of alternatives; rather, alternatives follow the rule of reason, where they are selected and discussed in a manner to foster meaningful public participation and informed decision making. The analysis was limited to short-term impacts for two reasons: (1) the proposed project itself is limited in scope to only short-term demolition activities; and (2) the EIR process for the proposed project was initiated by the presence of a historic resource on the project site, which could be adversely affected by demolition activities. In order to tailor the Alternatives analysis toward the project’s scope and potential impacts, this analysis has been limited to discussion of short-term impacts, and as a result focuses on the ability of alternatives to reduce impacts to the historic RFMC.

Alternatives 1 and 2 were chosen for their ability to avoid the significant and unavoidable impact associated with demolition of the historic RFMC. Alternative 1 would preserve the RFMC in place and allow CBU to reuse the structures for CBUSP uses. Alternative 2 would move the church to a new location, after which the site would be cleared and graded in the same manner as the proposed project.

The following environmental issues would result in a less than significant impact in a similar manner as the proposed project:

- Aesthetics
- Agriculture and Forest Resources

- Geology/Soils
- Land Use/Planning
- Mineral Resources
- Population and Housing
- Public Services
- Recreation
- Utilities/Service Systems

Rather than repeat a discussion of these non-significant impacts under each alternative, a summary of these impacts is presented below. The level of impact associated with these topics would be similar with the proposed project or any of the alternatives. Where impacts related to any of these issues do differ among project alternatives, an appropriate discussion is provided for the respective alternative as set forth subsequently in this alternatives analysis.

### **Aesthetics**

None of the alternatives propose the development of new structures that may impede views of scenic resources or alter the visual character of an area. In addition, none of the alternatives would create a substantial new source of light or glare since all involve moving or modifying the existing church building. Therefore, impacts to aesthetic resources are considered less than significant for all alternatives.

### **Agriculture and Forest Resources**

The alternatives are located in an urbanized area. A review of Figure OS-2 – Agricultural Suitability of the General Plan 2025 reveals that the project and relocation site are not designated as, and are not adjacent to or in proximity to any land classified as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency. Therefore, the alternatives will have no impact to farmland.

A review of Figure 5.2-2 – Williamson Act Preserves of the General Plan 2025 FPEIR reveals that the alternatives are not located within an area that is affected by a Williamson Act Preserve or under a Williamson Act Contract. Moreover, the sites are not zoned for agricultural use and are not next to land zoned for agricultural use; therefore, the alternatives will have no impact to agricultural zoning or Williamson Act contract lands.

### **Geology/Soils**

Seismic activity is to be expected in Southern California. In the City of Riverside, there are no Alquist-Priolo zones. The project and alternative relocation site do not contain any known fault lines and the potential for fault rupture is low. Both sites are relatively level and not subject to high risk of landslides, shrink-swell soils, lateral spreading, subsidence, liquefaction, or collapse.

The San Jacinto Fault Zone is located northeast of the City, and the Elsinore Fault Zone, located south of the City, have the potential to cause moderate to large earthquakes that would cause intense ground shaking. Adherence to The California Building Code, as well as other requirements identified and required by the City, will ensure ground shaking hazards are reduced to a less than significant level for all alternatives.

Erosion and loss of topsoil could occur as a result of the alternatives involving ground disturbance. State and Federal requirements call for the preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP) establishing erosion and sediment controls for construction activities. The project site includes approximately 3.14 acres and therefore, must also comply with the National Pollutant Discharge Elimination System (NPDES) regulations. In addition, the alternatives must comply with the Grading Code (Title 17), which requires the implementation of measures designed to minimize soil erosion. Compliance with State and Federal requirements and Title 17 will ensure that soil erosion or loss of topsoil will be less than significant for all alternatives.

### **Land Use and Planning**

None of the alternatives involves subdivision of land or the creation of streets that could alter the existing surrounding pattern of development or an established community. As with the project, future use of the project site for CBU purposes has already been analyzed for consistency with the City's General Plan in the CBUSP MND. The relocation alternative site would be located in a historic district where it would not conflict with any applicable land use plan, policy, or regulation. All alternatives are located in developed urban areas outside MSHCP habitat core or linkage areas. As a result, all alternatives would have less than significant impacts to land use.

### **Mineral Resources**

The project and alternatives are in urbanized areas that are not known to overly regionally or statewide significant mineral resources. State-classified MRZ-2 and MRZ-4 Mineral Resource Zones are shown in Figure 5.10-1, Mineral Resources of the GP 2025 FPEIR. The alternatives are located in MRZ-4, which indicates that there is insufficient data to know whether mineral resources can be found onsite. Since the alternatives are in developed, urbanized areas that are not known to contain significant mineral resources, impacts are less than significant.

### **Population/Housing**

The alternatives are in an urbanized area and do not propose new homes or businesses that would directly induce substantial population growth, and do not involve the addition of new roads or infrastructure that would indirectly induce substantial population growth. Therefore, none of the alternatives will affect population growth either directly or indirectly.

## **Public Services**

All alternatives are in an urbanized area that receives adequate public services. Alternatives at the project site would receive adequate fire services from Station 10 located at 2590 Jefferson Street and adequate police services from the Neighborhood Policing Center (Lincoln Station) located at 8181 Lincoln Avenue. Since the new location for Alternative 2 would be in the vicinity of the project site, it would likely receive the services from the same fire and police stations. None of the alternatives requires an intensification of land use that would require the expansion of fire and police facilities. All of the alternatives are non-residential uses that will not involve the addition of any housing units. Therefore, there would not be any increase in demand for schools, parks, or other public facilities, such as libraries and community centers. Therefore, all alternatives would have a less than significant impact on public services.

## **Recreation**

The alternatives will not include any uses that would increase the existing neighborhood and regional parks and therefore have no impact on existing neighborhood and regional parks. The alternatives will not include new recreational facilities or require the construction or expansion of recreational facilities; therefore, there will be no impact.

## **Utilities/Service Systems**

The alternatives are within the boundaries of the Santa Ana Regional Water Quality Control Board (RWQCB). Wastewater in the surrounding area is transported to the Riverside Regional Water Quality Treatment Plant. Future CBU uses at the site have been analyzed in the CBUSP MND and would not exceed applicable wastewater treatment requirements of the RWQCB with respect to discharges to the sewer system or stormwater system within the City. Use of the church in the relocation alternative (Alternative 2) would not increase wastewater demand significantly above existing conditions. Therefore, all alternatives would have less than significant impacts related to wastewater treatment.

The alternatives will not result in the construction of new or expanded water or wastewater treatment facilities. The alternatives are consistent with the Typical Growth Scenario of the General Plan 2025 where future water and wastewater generation was determined to be adequate. The alternatives are located on previously developed/improved sites within an urbanized area where no increase in impervious surfaces will occur that would require or result in the construction of new storm water drainage facilities or expansion of existing facilities. The alternatives will not exceed expected water supplies. The alternatives are consistent with the General Plan 2025 Typical Growth Scenario where future water supplies were determined to be adequate. The alternatives will not exceed wastewater treatment requirements of the RWQCB.

The alternatives are consistent with the General Plan 2025 Typical Growth Scenario where future wastewater generation was determined to be adequate. Therefore, all alternatives would have less than significant impacts to water supplies and storm water and wastewater treatment requirements.

The alternatives are consistent with the General Plan 2025 Typical Build-out Project level where future landfill capacity was determined to be adequate. The California Integrated Waste Management Act under the Public Resource Code requires that local jurisdictions divert at least 50 percent of all solid waste generated by January 1, 2000. The City is currently achieving a 60 percent diversion rate, well above State requirements. In addition, the California Green Building Code requires all developments to divert 50 percent of non-hazardous construction and demolition debris for all projects and 100 percent of excavated soil and land clearing debris for all non-residential projects beginning January 1, 2011. The alternatives must comply with the City's waste disposal requirements as well as the California Green Building Code and as such would not conflict with any Federal, State, or local regulations related to solid waste. By complying with existing regulations relating to solid waste, all alternatives would have less than significant impacts.

### **7.3.1 No Project Alternative**

The No Project Alternative assumes that the project site would not be modified and the existing church facilities would remain and continue in operation. The two on-site historic buildings (church and fellowship hall) would not be removed or demolished. The church would continue to operate despite the project site being zoned with CBUSP uses. Although project-level impacts would be avoided, the No Project Alternative would impede the development of the CBUSP land use of the site. The proposed project is considered necessary in order to meet the growth and development goals of CBU. This alternative would not meet the project objectives; however, CEQA requires the alternative to be analyzed.

#### **Air Quality**

As discussed in Section 4.1, Air Quality, the proposed project would not conflict with or obstruct implementation of the applicable air quality plan nor would its emissions violate any air quality standards. The project would only generate short-term emissions, which would all be at levels below applicable air quality standards.

The No Project Alternative would not generate any construction emissions. Therefore, the No Project Alternative would have a reduced impact to air quality than the proposed project.

### **Biological Resources**

As described in Section 4.2, Biological Resources, the existing ornamental landscaping, including mature trees, throughout the project site has the potential to provide nesting habitat for birds. Implementation of a mitigation measure requiring nesting bird surveys prior to ground-disturbing activities would reduce potential impacts to less than significant. The No Project Alternative would not result in any direct impacts to biological resources since there would be no vegetation removal involved. Therefore, impacts to biological resources would be reduced under this alternative compared to the proposed project.

### **Cultural Resources**

As described in Section 4.3, Cultural Resources, the on-site historical resources consist of the church sanctuary and fellowship hall buildings. The project activities include vegetation clearing and demolition of existing on-site buildings. Even after mitigation, the project would have a significant and unavoidable impact on a historical resource, the RFMC. The No Project Alternative would not remove any historic resources, nor involve disturbing any subsurface material that could potentially support cultural resources. Therefore, the significant impact associated with historic church demolition would be avoided. The No Project Alternative would have no impacts to cultural resources; in this regard, the No Project Alternative would be preferable compared to the proposed project.

### **Greenhouse Gas Emissions**

As discussed in Section 4.4, the project would temporarily emit greenhouse gases (GHGs) during demolition activities, but emissions would not be cumulatively considerable. Under the No Project Alternative, there would be no direct construction-related GHG emission impacts associated with use of heavy equipment since it would not require any new construction. Therefore, the No Project Alternative would have fewer GHG emissions than the project.

### **Hazards and Hazardous Materials**

As discussed in Section 4.5, Hazards and Hazardous Materials, lead-based paint (LBP) and asbestos-containing materials (ACM) may be found in the buildings on site. Project demolition activities have the potential to expose workers and the public to LBP and ACM. Demolition activities have the potential to disturb ACM and cause particles to become airborne, leading to worker and public exposure. Additionally, LBP can pose an ingestion hazard if it is released into the air or water during demolition activities. However, proper identification and remediation procedures conducted per the requirements of the County of Riverside, as described in MM HAZ-1, would reduce these impacts to less than significant. The No Project Alternative would not result in any potential increase in hazards or hazardous material usage since no demolition

would occur and any LBP and ACM on site would remain undisturbed. Therefore, the No Project Alternative would have reduced impacts on hazards and hazardous materials compared to the proposed project.

### **Noise**

As discussed in Section 4.6, Noise, the proposed project would have a potential noise impact resulting from the temporary use of heavy equipment for demolition. Construction mitigation measures could reduce noise levels below significance thresholds, however. The No Project Alternative would not result in any construction-related noise since no construction would occur. The No Project Alternative would not contribute to an increase in ambient noise levels. The No Project Alternative would avoid impacts related to excessive noise levels compared to the proposed project because no new noise sources would be developed. Therefore, the No Project Alternative would have reduced noise impacts compared to the proposed project.

### **Transportation/Traffic**

As described in Section 4.7, Traffic, the proposed project would not have any significant impacts to transportation facilities. A slight temporary increase in traffic would occur during the project as a result of equipment and worker movement to the site, but no roadways or intersections would be significantly affected. Since current operations would not change under the No Project Alternative, no roadway or intersection operations would be affected. Therefore, the No Project Alternative will have fewer traffic impacts compared to the proposed project.

### **Relationship to Project Objectives and Feasibility**

Under the No Project Alternative, the existing RFMC would continue operations. This alternative would not result in new construction. Table 7.0-1 provides a list of the project objectives and whether or not the alternative meets each objective.

**Table 7.0-1**  
**Summary of No Project Alternative Success at Meeting Project Objectives**

<b>Project Objective</b>	<b>Alternative Meets Objective?</b>
1. Prepare a site in order to maximize future use by CBU, in accordance with the approved CBU Specific Plan.	<b>No.</b> The No Project Alternative will not result in any site preparation. The site would continue to be utilized by the RFMC, and would not support CBU uses.
2. Accommodate future growth of the CBU campus.	<b>No.</b> The No Project Alternative does not propose any action that would accommodate growth of the CBU campus.
3. Remove an on-site septic system to enhance the use of the property and to facilitate a future sewer connection.	<b>No.</b> The No Project Alternative does not include removal of the septic system.

This alternative would reduce impacts to most resource areas relative to the proposed project. However, this alternative would not meet any of the project's basic objectives. Therefore, this alternative has been eliminated from further consideration and is determined to be not feasible.

### **7.3.2 Alternative 1 – Adaptive Reuse**

Alternative 1 proposes to preserve the historic buildings and utilize them for planned CBUSP uses. Under this alternative, the church and fellowship building would not be demolished, but the existing uses would change to accommodate the CBU land use. This alternative would address most basic objectives of the project; however, without demolishing the church the site would be potentially compromised in its ability to fully accommodate future planned uses. The greatest potential use of the site would therefore not be achieved. Overall, this alternative would have reduced impacts as a result of not having to demolish existing structures.

#### **Air Quality**

As discussed in Section 4.1, Air Quality, the proposed project would not conflict with or obstruct implementation of the applicable air quality plan nor would its emissions violate any air quality standards. Although all air quality impacts were determined to be less than significant, some short-term emissions of criteria air pollutants will be generated. Alternative 1 would preserve the on-site historical buildings and therefore would not generate emissions from the use of heavy equipment. Therefore, Alternative 1 would have reduced air quality impacts as a result of avoiding short-term emissions associated with demolition activities.

#### **Biological Resources**

As described in Section 4.2, Biological Resources, the existing ornamental landscaping, including mature trees, throughout the project site has the potential to provide nesting habitat for birds. Implementation of a mitigation measure requiring nesting bird surveys prior to ground-disturbing activities would reduce potential impacts to less than significant. Under Alternative 1, the existing historic resources on site would be preserved and reused for CBU purposes. Since ground-disturbing activities would be limited relative to the proposed project, Alternative 1 would have reduced impacts to biological resources.

#### **Cultural Resources**

As described in Section 4.3, Cultural Resources, the on-site historical resources consist of the church sanctuary and fellowship hall buildings. The proposed project would remove all historical resources. The demolition of the RFMC is considered significant and unavoidable, even after mitigation.

Alternative 1 would preserve historic structures by reusing them for CBUSP purposes. However, in order to truly preserve the structures, CBU uses must not require alterations to the property that would detract from its historic integrity. If such considerations are taken, this alternative would eliminate a significant and unavoidable impact of the project. Grading and ground disturbing would not be required under this alternative, resulting in no impact to potential buried cultural resources. Therefore, Alternative 1 has reduced impacts to cultural resources relative to the proposed project.

### **Greenhouse Gas Emissions**

As discussed in Section 4.4, the project would emit GHGs temporarily during demolition activities. There is no operational component for either the proposed project or this alternative; future use of the site was already analyzed in the CBUSP MND. Since Alternative 1 does not require demolition, it would emit less GHG and therefore have a reduced impact relative to the proposed project.

### **Hazards and Hazardous Materials**

As discussed in Section 4.5, Hazards and Hazardous Materials, LBP and ACM may be found in the buildings on site. Project demolition activities have the potential to expose workers and the public to LBP and ACM. Demolition activities have the potential to disturb ACM and cause particles to become airborne, leading to worker and public exposure. Additionally, LBP can pose an ingestion hazard if it is released into the air or water during demolition activities. However, proper identification and remediation procedures conducted per the requirements of the County of Riverside, as described in MM HAZ-1, would reduce these impacts to less than significant. Under Alternative 1, demolition of on-site structures potentially containing LBP and ACM would not be required, which would reduce the potential of exposure for workers and the public. Therefore, impacts would be reduced compared to the proposed project.

### **Noise**

As discussed in Section 4.6, Noise, the proposed project would result in significant noise impacts resulting from the temporary use of heavy equipment for demolition. Construction mitigation measures could reduce noise levels below significance thresholds, however. Under Alternative 1, very little or no construction would occur as the existing on-site structure would be reused. Therefore, Alternative 1 noise impacts would be reduced compared to the proposed project.

### **Transportation/Traffic**

As described in Section 4.7, Traffic, the proposed project would not create any significant impacts to transportation facilities. Demolition equipment and worker transport would slightly

increase traffic on adjacent intersections and roadways. However, all would continue to operate at a satisfactory LOS. Alternative 1 would not require new construction and therefore would not have any traffic impacts associated with construction. Therefore, Alternative 1 would have reduced traffic impacts compared to the proposed project.

### Relationship to Project Objectives and Feasibility

Under Alternative 1, the impacts of the project were reduced, including the significant and unavoidable impact related to demolishing the historic church on site. Table 7.0-2 provides a list of the project objectives and whether or not the alternative meets each objective.

**Table 7.0-2**  
**Summary of Alternative 1 Success at Meeting Project Objectives**

Project Objective	Alternative Meets Objective?
1. Prepare a site in order to maximize future use by CBU, in accordance with the approved CBU Specific Plan.	<b>No.</b> Alternative 1 will not result in any building demolition or site clearing. Therefore, it would limit the ability of CBU to fully utilize the site.
2. Accommodate future growth of the CBU campus.	<b>Yes.</b> Adaptive reuse by CBU of the church buildings would accommodate future growth.
3. Remove an on-site septic system to enhance the use of the property and to facilitate a future sewer connection.	<b>Yes.</b> Alternative 1 would likely result in the removal of the septic system. Historic structures shall be preserved, but future use may require site improvements such as removing the septic system and connecting to wastewater utilities.

Alternative 1 would meet some of the project objectives; however, the preservation of the historic church for reuse may hinder future use of the site. CBU may not be able to use the full potential of the site if the church remains. Therefore, although this alternative is feasible, it does not fully meet the basic project objectives and has been eliminated from further consideration.

### 7.3.3 Alternative 2 – Relocation

Alternative 2 would involve the relocation of the church and fellowship hall. This alternative would allow for the project site to be fully cleared for future development, and would also remove a significant and unavoidable impact associated with demolition of historic structures on site. The feasibility of Alternative 2 is determined primarily by two factors: finding a suitable location and relocation structural capability of the historic buildings.

The structural feasibility of building transportation is influenced by factors such as its size and design. The church building, because of its size, could not be transported in one piece and would need to be separated into small enough portions to fit within road widths during transport. Design

features, such as the church's stone veneer, may be significantly damaged in preparation for and during relocation. Technical feasibility would require further investigation.

The following two relocation alternatives were considered:

- Relocation to Another Site on the CBU Property: While CBU has an architectural standard that calls for Spanish Colonial Revival influenced contemporary architecture, there is within the campus a historic district that includes some Mid-Century Modern historic buildings. If the church was relocated to this area, it would be consistent with other nearby buildings. Located within this district are Smith & Simmons Halls, Van Dyne Field House, and Wallace Theater. However, there is currently no room for the RFMC in this historic district. Due to the lack of appropriate locations and space on the campus, the CBU campus was rejected as a possible relocation site.
- Relocation to Property outside the CBU Campus: If a property could be found that would accommodate the Sanctuary and its contributors, relocating it to such a site could be appropriate. The surrounding vicinity of the project site, including historic districts, is developed and urbanized, with few vacant properties available that could house the RFMC. However, a one-acre vacant lot has been identified on 9185 Hawthorne Avenue, which is approximately 1.2 miles northwest of the project site.

This alternative analysis assumes that the church would be moved to an off-site location since there is no suitable location on the CBU campus. In addition, moving the church to a location on the CBU property would result in similar impacts to the Adaptive Reuse Alternative. If the church was moved to the historic district within the campus, it would likely assume a Mixed Use/Academic land use, as would be consistent with the CBUSP. Therefore, the church would be reused just as in Alternative 1, but in a different location on campus. Since there was no foreseeable benefit to this scenario, moving the church to another location on campus was dismissed in favor of an off-site location alternative.

The previously described vacant property on 9185 Hawthorne Avenue will be used for this analysis. The site is located approximately 1.2 miles northwest of the project site, an approximately 2.1-mile driving distance. The vacant property consists of an approximately one acre parcel adjacent to an existing church. The property is zoned R-1-7000, Single Family Residential with a minimum 7,000-square foot lot size.

### **Air Quality**

As discussed in Section 4.1, Air Quality, the proposed project would not conflict with or obstruct implementation of the applicable air quality plan nor would its emissions violate any air quality standards. Although all air quality impacts were determined to be less than significant, some

short-term emissions of criteria air pollutants will be generated. Alternative 2 would still result in emissions from the use of heavy equipment in the relocation of the historic building. Vegetation removal and rough grading would still occur under this Alternative. Since less demolition waste would need to be transported, however, Alternative 2 may have fewer impacts related to vehicle exhaust during demolition than under the proposed project. Therefore, air quality impacts under Alternative 2 would be reduced.

### **Biological Resources**

As described in Section 4.2, Biological Resources, the existing ornamental landscaping, including mature trees, throughout the project site has the potential to provide nesting habitat for birds. Implementation of a mitigation measure requiring nesting bird surveys prior to ground-disturbing activities of the proposed project would reduce potential impacts to less than significant. Under Alternative 2, site clearing and vegetation removal would still occur and similar mitigation measures would be required. Overall, impacts to biological resources would be the same as those from the proposed project.

### **Cultural Resources**

As described in Section 4.3, Cultural Resources, the on-site historical resources consist of the church sanctuary and fellowship hall buildings. The proposed project would remove all historical resources. The demolition of the RFMC is considered significant and unavoidable, even after mitigation.

Alternative 2 would preserve the historic church by moving it to a new location. Under this alternative, the impacts to cultural resources would be reduced by avoiding the demolition of a historic resource. This alternative would therefore eliminate a significant and unavoidable impact of the project. Site clearing and grading would still occur under Alternative 2, however. These activities may result in impacts to buried cultural resources. Overall, impacts to cultural resources under Alternative 2 would be reduced.

### **Greenhouse Gas Emissions**

As discussed in Section 4.4, the project would emit GHGs temporarily during demolition activities. Alternative 2 would also generate GHGs through the use of heavy equipment to transport the church. Subsequent clearing and grading would also emit GHGs. This alternative requires fewer trips to dispose of demolition waste. Therefore, this alternative would have fewer GHG emissions.

### **Hazards and Hazardous Materials**

As discussed in Section 4.5, Hazards and Hazardous Materials, LBP and ACM may be found in the buildings on site. Project demolition activities have the potential to expose workers and the public to LBP and ACM. However, proper identification and remediation procedures conducted per the requirements of the County of Riverside, as described in MM HAZ-1, would reduce these impacts to less than significant. Under Alternative 2, demolition of on-site structures potentially containing LBP and ACM would not be required. However, relocation would require cutting the church into pieces in order to feasibly transport it. Preparation for relocation could therefore generate airborne dust with LBP and ACM, which could be inhaled by workers and the public. Similarly, identification and remediation procedures would be performed. In both cases, impacts would be similar and less than significant.

### **Noise**

As discussed in Section 4.6, Noise, the proposed project would result in significant noise impacts resulting from the temporary use of heavy equipment for demolition. Construction mitigation measures could reduce noise levels below significance thresholds, however. Under Alternative 2, similar noise impacts would occur as heavy equipment is used to move the church to a new location, and when the site is subsequently cleared and graded. Therefore, Alternative 2 would have similar noise impacts to the proposed project.

### **Transportation/Traffic**

As described in Section 4.7, Traffic, the proposed project would not create any significant impacts to transportation facilities. Demolition equipment and worker transport would slightly increase traffic on adjacent intersections and roadways. However, all would continue to operate at a satisfactory LOS. Alternative 2 would have similar temporary traffic impacts during building relocation and subsequent site clearing and grading. Therefore, this alternative would have similar transportation impacts to the proposed project.

### **Relationship to Project Objectives and Feasibility**

Under Alternative 2, the historic church building would be moved to an off-site location, where it would assume either a similar (church) use or another use, such as commercial. Table 7.0-3 provides a list of the project objectives and whether or not the alternative meets each objective.

**Table 7.0-3**  
**Summary of Alternative 2 Success at Meeting Project Objectives**

Project Objective	Alternative Meets Objective?
1. Prepare a site in order to maximize future use by CBU, in accordance with the approved CBU Specific Plan.	<b>Yes.</b> Alternative 2 would result in the removal of on-site buildings, and the rendering of the site as available for future CBU land uses.
2. Accommodate future growth of the CBU campus.	<b>Yes.</b> Building relocation and site clearing would make the site available to accommodate future growth of the CBU campus.
3. Remove an on-site septic system to enhance the use of the property and to facilitate a future sewer connection.	<b>Yes.</b> The on-site septic system would be removed as part of the site clearing and grading at the site.

Alternative 2 meets the core objectives of the project by rendering the site available for future CBU uses. It would also allow for the removal of the on-site septic system. Due to the size of the church and resulting difficulty in its relocation, this alternative is not considered feasible. Large structures such as the church would require separation into pieces in order to move, which is both technically difficult and cost prohibitive. Since this alternative is considered infeasible, it has been eliminated from further consideration.

## 7.4 EVALUATION OF ALTERNATIVES

In accordance with the CEQA Guidelines Section 15126.6(d), the discussion of the environmental effects of the alternatives may be less detailed than the discussion of the impacts of the proposed project. Table 7.0-4 provides a summary of the alternatives impact analysis; an analysis comparing the impacts of the alternatives with the proposed project is provided in Section 7.6.

**Table 7.0-4**  
**Summary of Comparison of Alternatives Impacts**

Environmental Issue Area	Proposed Project	No Project	Alternative 1 – Adaptive Reuse	Alternative 2 – Relocation
Aesthetics	LTS	—	—	—
Air quality	LTS	▼	▼	▼
Biological resources	LTS	▼	▼	—
Cultural resources	SU	▼	▼	▼
Geology and Soils	LTS	—	—	—
Greenhouse gas emissions	LTS	▼	—	▼
Hazards and hazardous materials	LTS	▼	▼	—
Hydrology and water quality	LTS	▼	▼	—
Land use and planning	NI	—	—	—
Minerals	LTS	—	—	—

**Table 7.0-4**  
**Summary of Comparison of Alternatives Impacts**

Environmental Issue Area	Proposed Project	No Project	Alternative 1 – Adaptive Reuse	Alternative 2 – Relocation
Noise	LTS	▼	▼	—
Population and Housing	—	—	—	—
Public Services	NI	—	—	—
Recreation and Parks	NI	—	—	—
Transportation and traffic	LTS	▼	▼	—
Utilities and service systems	NI	—	—	—
Meets all project objectives?	Yes	No	No	Yes

△ Alternative is likely to result in greater impacts to issue when compared to proposed project, but impacts are still less than significant.

— Alternative is likely to result in similar impacts to issue when compared to proposed project.

▼ Alternative is likely to result in reduced impacts to issue when compared to proposed project.

NI = No Impact; LTS = less than significant impact SU = significant, unavoidable impact

## 7.5 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

As indicated in Table 7.0-4, the No Project Alternative would result in the fewest environmental impacts and therefore would be considered the environmentally superior alternative. However, Section 15126.6(e)(2) of the CEQA Guidelines states that if the environmentally superior alternative is the No Project Alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.

Of the alternatives evaluated above, the Adaptive Reuse Alternative would result in the fewest environmental impacts and therefore would be considered the environmentally superior alternative. However, the Adaptive Reuse Alternative does not meet the major goal of the project because it would not allow CBU to fully utilize the site. While relocation would meet all major goals, it is considered infeasible due to technical constraints with moving the building. Therefore, no feasible alternatives have been identified that meet the project goals. All alternatives are rejected in favor of the proposed project.

## 7.6 REFERENCES

14 CCR 15000–15387 and Appendices A–L. Guidelines for Implementation of the California Environmental Quality Act, as amended.

California Public Resources Code, Sections 21000–21177. California Environmental Quality Act (CEQA), as amended.

## **CHAPTER 8.0**

### **GROWTH-INDUCING IMPACTS**

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Section 15126.2(d) of the CEQA Guidelines requires a discussion of how the potential growth-inducing impacts of the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Induced growth is distinguished from the direct employment, population, or housing growth of a project (14 CCR 15000 et seq.). If a project has characteristics that “may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively,” then these aspects of the project must be discussed as well. Induced growth is any growth that exceeds planned growth and results from new development that would not have taken place in the absence of the proposed project. Typically, the growth-inducing potential of a project would be considered significant if it stimulates population growth or a population concentration above what is assumed in local and regional land use plans, or in projections made by regional planning authorities, such as the Southern California Association of Governments.

The CEQA Guidelines also indicate that growth should not be assumed to be either beneficial or detrimental (14 CCR 15126.2(d)). According to Section 15126.2(d) of the CEQA Guidelines, a project may foster economic or population growth, or additional housing, either indirectly or directly, in a geographical area if it meets any one of the following criteria:

- The project would remove obstacles to population growth.
- Increases in the population may tax existing community service facilities, causing significant environmental effects.
- The project would encourage and facilitate other activities that could significantly affect the environment.

The Riverside Free Methodist Church (RFMC) Demolition Project (proposed project) would involve the demolition of the RFMC, site clearing, and rough grading at the proposed project site. The proposed project is limited to demolition activities and would not involve the development of additional housing. There is no operational component of the proposed project.

While the proposed project itself does not involve any development on the site, it would remove an impediment to future growth of the California Baptist University (CBU) campus. Future development on the site would be consistent with CBU Specific Plan (SP). The CBUSP MND analyzed the growth-inducing effects of the SP. While the SP would induce population not considered by the General Plan (GP) 2025, all effects associated with this growth could be mitigated to levels that are less than significant. Therefore, since the project only consists of demolition activities and future uses have already been analyzed, the proposed project would not result in any significant growth-inducing impacts.

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## **CHAPTER 9.0 LIST OF PREPARERS**

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Per Section 15129 of the California Environmental Quality Act (CEQA) Guidelines, an environmental impact report (EIR) shall identify all Federal, State, or local agencies, organizations, and private individuals consulted in preparing the EIR, and the persons, firm, or agency preparing the EIR.

### **9.1 CITY OF RIVERSIDE**

- Erin Gettis, Historic Preservation Officer/Principal Planner
- Teri Delcamp, Historic Preservation Senior Planner

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- David Cisneros, GIS/Graphics Specialist

### **9.3 TECHNICAL ANALYSES**

#### **9.3.1 Air Quality and Greenhouse Gas Technical Report**

- LSA, Tony Chung, PhD, Principal
- LSA, Ron Brugger, Senior Air Quality Specialist

#### **9.3.2 Biological Technical Report**

- LSA, Sarah Barrera, Senior Biologist

### **9.3.3 Cultural Resources Survey and Evaluation**

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- Steven T. Weatherton, Project Manager
- Norman S. Eke, Senior Vice President/Managing Officer

### **9.3.5 Noise Technical Report**

- LSA, Tony Chung, PhD, Principal
- LSA, Ron Brugger, Senior Air Quality Specialist

### **9.3.6 Traffic Analysis**

- LSA, Joseph Urzua, Senior Transportation Planner

**APPENDIX A**  
**NOTICE OF PREPARATION (NOP) AND INITIAL STUDY, NOP MAILING**  
**LIST, NOP RESPONSE LETTERS**

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**APPENDIX A-1**

**NOTICE OF PREPARATION (NOP) AND INITIAL STUDY**

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**NOP MAILING LIST**

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**APPENDIX A-3**  
**NOP RESPONSE LETTERS**

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## **APPENDIX B**

### **AIR QUALITY AND GREENHOUSE GAS EMISSIONS ANALYSIS**

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## **APPENDIX C: MSHCP CONSISTENCY REPORT**

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## **APPENDIX D**

### **CULTURAL RESOURCES IMPACTS REPORT**

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## **APPENDIX E**

### **PHASE 1 ENVIRONMENTAL SITE ASSESSMENT**

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## **APPENDIX F NOISE IMPACT ANALYSIS**

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## **APPENDIX G**

### **TRAFFIC IMPACT ANALYSIS**

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